

Curriculum Vitae

Personal Information:

First name: Mohsen

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Date of birth: August 10 1968

Place of Birth: Ilam-Iran

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Education:

Ph. D. in Plant Physiology, Tarbiat Moalem University, Tehran, Iran, 2004.

Thesis title: Effect of endomycorrhizal fungi on soybean tolerance under salinity.

M. Sc. in Plant Sciences (Physiology), University of Tehran, Iran, 1996.

Thesis title: Comparative study on essential oils in seed and tissue culture of *Cuminum cyminum* and *Bunium persicum*.

B. Sc. in Biology, Razi University, Kermanshah-Iran 1992

Research interest:

Molecular biology of plant secondary metabolites (Metabolomics, Gene expression).

Plant enzymology and protein (Extraction, Purification, Proteomics)

Plant cell, tissue and organ culture

Technical experiences:

Plant Chemical & Biochemical Analysis Methods (Chemical Extraction, TLC, GC, HPLC, Electrophoresis)

Plant Cell, Tissue and Organ Culture Methods

Plant enzyme assays.

Plant Molecular Techniques (DNA & RNA extraction, RT-PCR, Gene Cloning)

Papers:

- 1. Ghorbanli M., Ebrahimzadeh H., Sharifi M. Effects of NaCl and mycorrhizal fungi on antioxidative enzymes in soybean. *Biologia Plantarum* 48(4): 575-581, 2004.**
- 2. Sharifi M., Pouresmael M. Breaking seed dormancy in *Bunium persicum* by stratification and chemical substances. *Asian Journal of Plant Sciences*, 5(4): 695-699 2006.**
- 3. Sharifi M., Ghorbanli M., Ebrahimzadeh H. Improved growth of salinity-stressed soybean after inoculation with salt pre-treated mycorrhizal fungi. *Journal of Plant Physiology*, 164: 1144-1151 2007.**
- 4. Ebrahimzadeh H., Sharifi M. Comparative study on essential oils in seed and tissue culture of *Cuminum cyminum* and *Bunium persicum*. *Iranian Journal of Biology*, 5(3-4): 154-168 1997.**
- 5. Sharifi M., Pouresmael M. Effect of some chemical compounds on *Bunium* seed dormancy breaking and germination. *Journal of Agriculture and Natural Resource Sciences of Gorgan University*, 10(2): 33-41 2003.**

6. Poursmael M., Sharifi M. Effect of cold and cytokinins treatments on dormancy breaking of *Bunium persicum* seeds, Iranian Medicinal and Aromatic Plant Research, 19(2): 183-193 2003.
7. Sharifi M., Ghorbanli M., Barati M. Study of soil and biological parameters in rhizosphere of Pinus and of Chitgar and Taleghani parks in Tehran, Iranian Journal of Biology, 20(1) 42-49 2007.
8. Noori A., Kalantari M., Sharifi M. Study of mycorrhizal plants in Kerman province, Journal of Environmental Sciences, 6(2): 2008.
9. Naghdi Badi H., Soroshzadeh A., Rezazadeh Sh., Sharifi M., Ghalavand A., Omidi H. Review on Borage (Valuable Medicinal Plant and Richest Plant Source of Gamma Linolenic Acid), Journal of Medicinal Plants, 6 (24): 1-16 2007.
10. Naghdi Badi H., Soroshzadeh A., Rezazadeh Sh., Sharifi M., Ghalavand A., Rezai A. Evaluation of phytochemical and production potential of Borage (*Borago officinalis* L.) during the growth cycle, Journal of Medicinal Plants, 7(4): 37-43 2008. (In English)
11. Dolatabadian A., Modarres-Sanavy S.A.M., Sharifi M. Effect of salicylic acid and salt on wheat seed germination. Acta Agriculturae Scandinavica Section B- Soil and Plant Science, 59: 456-464 2009.
12. Dolatabadian A., Modarres-Sanavy S.A.M., Sharifi M. Effect of Water Deficit Stress and Foliar Application of Ascorbic acid on Antioxidants Enzymes Activity and Some Biochemical's Changes in Leaves of Grain Corn (*Zea maize* L.). Iranian Journal of Biology, 22(3): 407-22 2009.
13. Noori A.S., Kalantari-Manochehri K., Sharifi M., Tahernezhad A., Mirtajadini S.M. Study on copper and zinc content in soil and root of

Mycorrhizal plants in some areas in Kerman province. Iranian Journal of Biology, 22(2): 237-248 2009.

- 14. Dolatabadian A., Modarres-Sanavy S.A.M., Sharifi M. Alleviation of Water Deficit Stress Effects by Foliar Application of Ascorbic acid on *Zea mays* L. Journal of Agronomy and Crop Science, 195: 347-355 2009.**
- 15. Tahsili J., Sharifi M., Behmanash M., Ziaei M. Gene expression of Eugenol -O- methyl transferase and components of essential oils in (*Ocimum basilicum* L.) at different stages of growth. Iranian Journal of Biology, 23(1): 18-25 2010.**
- 16. Soltani F., Sharifi M., Khajeh Kh. Yousefzadi M. Study of essential oil composition, menthone reductase activity and antimicrobial activity of *Mentha piperita* in two stages of growth. Iranian Journal of Biology, 21(5): 62-70 2009.**
- 17. Naghdi Badi H., Sorooshzadeh A., Sharifi M., Ghalavand A., Saadat S., Rezazadeh S. Biochemical and Antioxidant Responses of Borage Seedlings in Saline Environments. Journal of Medicinal Plants, 8(5): 13-23 2009. (In English)**
- 18. Alipour-Darvary H., Zare-Mayvan H., Sharifi M., Peroxidase activity in *Raphanus sativus* and its relationship with soil heavy metals. Journal of Science University of Tehran, 35(1): 37-43 2009.**
- 19. Ahmadian Chashmi N., Sharifi M., Karimi F., Rahnama H. Differential production of tropane alkaloids in hairy roots and *in vitro* cultured two accessions of *Atropa belladonna* L. under nitrate treatments. Zeitschrift fuer Naturforschung C, 65c: 373-379 2010.**
- 20. Yousefzadi M., Sharifi M., Behmanesh M., Moyano E., Bonfill M., Cusido R.M., Palazon J. 2010. Podophyllotoxin: Current approaches to**

its biotechnological production and future challenges. *Engineering in Life Science*, 10: 281-292.

21. Yousefzadi M., Sharifi M., Ahmadian Chashmi N., Behmanesh M., Ghasempour A. Optimization of podophyllotoxin extraction method from *Linum album* cell cultures. *Pharmaceutical Biology*, 48(12): 1421-1425 2010.
22. Yousefzadi M., Sharifi M., Behmanesh M., Ghasempour A., Moyano E., Palazon J. Salicylic acid-induced changes to phenylpropanoid gene expression and podophyllotoxin production in cell cultures of *Linum album*. *Biotechnology Letters*, 32: 1739-1743 2010.
23. Ahmadian Chashmi N., Sharifi M., Karimi F., Rahnama H. Comparative study of tropane alkaloids production in hairy roots and plantlet cultures of *Atropa belladonna* L. by salicylic acid treatments. *Iranian Journal of Plant Biology*, 1:3 63-76 2010.
24. Moradi A., Sharifi M., Mousavi A. Effect of methyl jasmonate on H6H and PMT genes expression in hairy root and plantlet cultures of *Atropa belladonna* L. *Iranian Journal of Biology*, 24(3): 366-372 2010.
25. Sharifi M., Mohtashamian M., Riyahi H., Aghae A., Alavi S.M. The effects of Vesicular-Arbuscular Mycorrhizal (VAM) fungus *Glomus etunicatum* on growth and some physiological parameters of basil. *Iranian Medicinal Plant*, 36: 85-94 2010.
26. Mahdavi B., Modarres-Sanavy S.A.M., Aghaalikhani M., Sharifi M., Dolatabadian A. Chitosan improves osmotic potential tolerance in Safflower (*Carthamus tinctorius* L.) seedlings. *Journal of Crop Improvement*, 25:6 728-741 2011.
27. Mirzaei J., Akbarinia M., Mohamadi Goltapeh E., Sharifi M., Rezaei Danesh Y. Effect of arbuscular mycorrhizae fungi on morphological and

- physiological characteristics of *Pistacia khinjuk* under drought stress. Iranian Journal of Forest and Poplar Research, 19:2 291-300 2011.
28. Ziaei M., Sharifi M., Behmanesh M., Razavi K. Gene expression and activity of phenyl alanine amonia-lyase and chemical composition of *Ocimum basilicum* L. at different growth stages. Iranian Journal of Biotechnology, 10:1 32-39 2012
 29. Esmaeilzadeh Bahabadi S., Sharifi M., Safaie N., Murata J., Yamagaki T., Satake H. Increased lignan biosynthesis in the suspension cultures of *Linum album* by fungal extracts. Plant Biotechnology Reports, 5:367–373 2011.
 30. Vakili B., Karimi F., Sharifi M., Behmanesh M. Increasing tropane alkaloids synthesis and *h6h* gene expression in plantlets of *Atropa belladonna* L. by carbohydrates, Journal of Modares Biological Sciences and Technology, 2(1): 5-18 2011.
 31. Ramak P., Sharifi M., Kazempour-Osaloo S., Ebrahimzadeh H. Behmanesh M. Studies on seed germination and in vitro shoot multiplication of *Satureja khuzistanica* Jamzad, an important medicinal plant, African Journal of Plant Biotechnology, 10(83): 19407-19414 2011.
 32. Ghannadnia M., Haddad R., Zarinkamar F., Sharifi M. Different expression of limonene synthase gene in organs and developmental stages of cumin (*Cuminum cyminum* L.), Iranian Journal of Medicinal and Aromatic Plants, 27(3): 495-508 2011.
 33. Dahajipour M., Ghanati F., Behmanesh M., Sharifi M. The activity and gene expression of peroxidase and phenylalanine ammonialyase in *Linum usitatissimum* L. under aluminium stress. Journal of Science (Tarbiat Moalem University), 11 (1): 23-36 1390 (2011).

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39. Shahabivand S., Zare Maivan H., Mohamadi Goltapeh E., Sharifi M., Aliloo A.A. The effects of root endophyte and arbuscular mycorrhizal fungi on growth and cadmium accumulation in wheat under cadmium toxicity. *Plant Physiology and Biochemistry* 2: 60C 53-58 2012.
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phenylpropanoids content. *Journal of Medicinal Plants and By-products*. 1: 23-34 2012.

41. Sadeghi I., Yousefzadi M., Behmanesh M., Sharifi M., Moradi A. In vitro Cytotoxic and Antimicrobial Activity of Essential Oil from *Satureja intermedia*. *Iranian Red Crescent Medical Journal* 15(1): 70-74 2013.
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43. Ramak P., Kazempour Osaloo S., Ebrahimzadeh H., Sharifi M., Behmanesh M. Inhibition of the mevalonate pathway enhances carvacrol biosynthesis and DXR gene expression in shoot cultures of *Satureja khuzistanica*. *Journal of Plant Physiology* 170: 1187– 1193 2013.
44. Fakhari S., Sharifi M., Yousefzadi M., Beshamgan E. Effect of some phytohormones on podophyllotoxin production in cell and plantlets cultures of *Linum album*. *Journal of Medicinal Plants and By-products* 1: 83-89 2013.
45. Ahmadian Chashmi N., Sharifi M., Yousefzadi M., Behmanesh M., Rezadoost H., Cardillo A., Palazon J. Analysis of 6-methoxy podophyllotoxin and podophyllotoxin in hairy root cultures of *Linum album* Kotschy ex Boiss, *Medicinal Chemistry Research* 22:745–752 (2013)
46. Afkar S., Karimzadeh Gh., Jalali Javaran M., Sharifi M., Behmanesh M. Methyl jasmonate-induced changes in non- and antioxidant-enzymatic defense in Peppermint (*Mentha piperita*). *Journal of Plant Physiology and Breeding* 3(1): 13-21, 2013.

47. Afkar S., Karimzadeh Gh., Jalali Javaran M., Sharifi M., Behmanesh M. Influence of methyl jasmonate on menthol production and gene expression in Peppermint (*Mentha piperita* L.). *Journal of Medicinal Plants and By-products* 1: 75-82, 2013.
48. Esmailzadeh Bahabadi S., Sharifi M. Increasing the production of plant secondary metabolites using biotic elicitors. *Journal of Cell & Tissue (JCT)* 4(2): 119-128 2013. (Review Article)
49. Mirzaei J., Akbarinia M., Mohamadi Goltapeh E., Sharifi M., Rezaei Danesh Y. Classification of *Pistacia atlantica* and *P. khinjuk* sites in Ilam based on environmental factors and arbuscular mycorrhizal fungi. *Journal of Plant Researches*, 26 (3): 341-351 1392 (2013).
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53. Tahsili J., Sharifi M. Safaie N., Esmailzadeh-Bahabadi S., Behmanesh M. Induction of lignans and phenolic compounds in cell culture of *Linum album* by culture filtrate of *Fusarium graminearum*. *Journal of Plant Interactions* 9(1): 412–417, 2014.

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56. Khanpour-Ardestani N., Sharifi M., Behmanesh M. Establishment of callus and cell suspension culture of *Scrophularia striata* Boiss: an in vitro approach for acteoside production. *Cytotechnology*, 67: 475-485 2015.
57. Moradi Peynevandi K., Sharifi M., Behmanesh M. Effects of methyl jasmonate, on stevioside & rebaudioside A content and expression of the ent-Kaurenoic acid 13-hydroxylase gene in *Stevia rebaudiana* Bert. *in vitro*. *Iranian Journal of Plant Biology*, 21: 99-110 2014.
58. Fakhari S., Sharifi M. Increased podophyllotoxin production and phenylalanine ammonia lyase activity in cell culture of *Linum album* by methyl jasmonate. *Journal of Plant Production* 20 (4): 163-176, 2014.
59. Khajehzadeh MH., Zare-maivan H., Ghanati F., Sharifi M. Changes of enzymes activity and production of secondary metabolites of *Artemisia aucheri* in different altitudes and its relation to adaptation. *Journal of Chemical Health Risks*, 4(3): 57–66 2014.
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61. Ghannadnia M., Haddad R., Zarinkamar F., Sharifi M. Manganese treatment effects on terpene compounds of *Cuminum cyminum* flowers. *Industrial Crops and Products*, 53: 65-70 2014.
62. Moieni-Korbekandi Z., Karimzadeh Gh., Sharifi M. Cold-induced changes of proline, malondialdehyde and chlorophyll in spring Canola cultivars. *Journal of Plant Physiology and Breeding* 4(1): 1-11 2014.
63. Ramak P., Kazempour Osaloo S., Ebrahimzadeh H., Sharifi M., Behmanesh M. Expression of gene 1-deoxy-D-xylulose 5-phosphate reductoisomerase and its relation to monoterpene carvacrol biosynthesis in *Satureja khuzestanica*. *Journal of Plant Researches*, 27 (4): 622-634 1393 (2014).
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65. Ramezani M., Ehteshami S.M.R., Sharifi M., Chaichi M.R. Using of tolerance indicators to determine the best method for resistance to drought stress of forage corn S.C.540 in different levels of phosphorus fertilizer. *Cereal Research*, 4 (3): 239-252 1393 (2014).
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68. Sadeghi I., Behmanesh M., Ahmadian Chashmi N., Sharifi M., Mohammad-Soltani B. 6-Methoxy podophyllotoxin induces apoptosis via

inhibition of TUBB3 and TOP1A gene expressions in 5637 and K562 cancer cell lines. *Cell Journal* 17(3): 502-509 2015.

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- altered primary metabolism. *Ecotoxicology and Environmental Safety*, 142: 293–302 2017.
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- 1- Effects of phosphate solubilizing bacteria and micorrhiza on yield and yield components ingrain corn (SC704), Mousavi jangali A., Azad University, 2004.
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