

In the Name of God



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I. Personal Information:

Name: Ahmad

Family Name: Moieni

Date of Birth: 1965

Place of Birth: Ghazvin, Iran

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II. Educational Records:

Degree	Institution	Place	Field	Date
B.Sc.	Univ. of Tehran	Iran	Agronomy & Plant Breeding	1985
M.Sc.	INP-ENSAT	France	Plant Breeding	1992, 1993
Ph.D.	INP-ENSAT	France	Plant Biology	1997

III. Academic Experiences:

- 1) Head of Department of Plant Breeding and Biotechnology, Faculty of Agriculture, Tarbiat Modares Univ., Tehran, Iran (1998-2000 & 2002-2004)
- 2) Associate professor, Department of Plant Breeding and Biotechnology, Faculty of Agriculture, Tarbiat Modares Univ., Tehran, Iran (Oct 2005 – continued)
- 3) Assistant professor, Department of Plant Breeding and Biotechnology, Faculty of Agriculture, Tarbiat Modares Univ., Tehran, Iran (Mar 1997 – Sep 2005)
- 4) Member of Doctoral Thesis Examination Committee at the Faculty of Agriculture, Tarbiat Modares Univ.
- 5) Member of Doctoral Comprehensive Examination Committee at the Faculty of Agriculture, Tarbiat Modares Univ.
- 6) Member of Research Committee at the Faculty of Agriculture, Tarbiat Modares Univ.
- 7) Establishment of Plant cell, Tissue and Organ Culture Laboratory in the Faculty of Agriculture, Tarbiat Modares Univ.
- 8) Establishment of five *in vitro* and *in vivo* controlled plant growth rooms in the Faculty of Agriculture, Tarbiat Modares Univ.
- 9) Representative of Post-Graduate Study at the Faculty of Agriculture, Tarbiat Modares Univ.

IV. Membership of Editorial Board of Journals:

- Iranian Journal of Genetics and Plant Breeding
- Journal of Crop Biotechnology (In Farsi)

V. Membership of Scientific Societies:

- 1) Iranian Society of Crop Production and Breeding (I.S.C.P.B.)
- 2) Iranian National Society of Biotechnology

VI. Research Interests:

- 1) Haploid plant production by anther culture and isolated microspore culture
- 2) Secondary metabolite production in hairy roots and plant cell suspensions
- 3) Micropropagation

XII. Courses Taught:

- 1) Plant cell, tissue and organ culture, Course, M.Sc., Tarbiat Modares Univ., Iran
- 2) Advanced plant breeding (Part 1), Course, M.Sc., Tarbiat Modares Univ., Iran
- 3) New subjects in plant breeding, M.Sc., Tarbiat Modares Univ., Iran

VII. Publications and Journal Papers:

Book:

Abdollahi, Mohammad Reza & Moieni, Ahmad (2011) Rapeseed Androgenic haploids: Production and genetics Transformation. LAP, LAMBERT, Academic Publishing, Germany.

Papers:

- 1) Javadian, N., Karimzadeh, G., Sharifi, M., and Moieni, A. (2022). Effect of ploidy level on podophyllotoxin content and expression of genes related to its biosynthesis in callus cultures of *Linum album*. *Biologia*. 1-10.
- 2) Kashani, K., Sabet, M. S., Jalali Javaran, M., and Moieni, A. (2022). Bottleneck removal of paclitaxel biosynthetic pathway by overexpression of DBTNBT gene under methyl- β -cyclodextrin and coronatine elicitation in *Taxus baccata* L. *Plant Cell, Tissue and Organ Culture (PCTOC)*, 149(1), 485-495.
- 3) Salehi, M., Farhadi, S., Moieni, A., Safaie, N., and Hesami, M. (2021). A hybrid model based on general regression neural network and fruit fly optimization algorithm for forecasting and optimizing paclitaxel biosynthesis in *Corylus avellana* cell culture. *Plant Methods*, 17(1), 1-13.
- 4) Pourmohammad, A., Moieni, A., Dehghani, H., and Rashidi Monfared, S. (2021). Field-grown donor plants and arabinogalactan proteins improve microspore embryogenesis in sweet pepper (*Capsicum annuum* L.). *In Vitro Cellular and Developmental Biology-Plant*, 57(3), 510-518.
- 5) Kabiri, F., Moieni, A., Baghizadeh, A., and Movahedi, Z. (2021). Study on the factors effective in callus induction in grape. *Research in Pomology*, 5(2), 63-71.

- 6) Farhadi, S., Moieni, A., Safaie, N., Sabet, M. S., and Salehi, M. (2020). Fungal cell wall and methyl- β -cyclodextrin synergistically enhance paclitaxel biosynthesis and secretion in *Corylus avellana* cell suspension culture. *Scientific reports*, 10(1), 1-10.
- 7) Salehi, M., Moieni, A., Safaie, N., and Farhadi, S. (2020). Whole fungal elicitors boost paclitaxel biosynthesis induction in *Corylus avellana* cell culture. *Plos one*, 15(7), e0236191.
- 8) Farhadi, S., Sabet, M. S., Moieni, A., and Malboobi, M. A. (2020). Effect of Two Phosphatase AtPAP17 and AtPAP26 Gene Knockout on Growth Period Duration and Flowering in *Arabidopsis thaliana*.
- 9) Farhadi, S., Salehi, M., Moieni, A., Safaie, N., and Sabet, M. S. (2020). Modeling of paclitaxel biosynthesis elicitation in *Corylus avellana* cell culture using adaptive neuro-fuzzy inference system-genetic algorithm (ANFIS-GA) and multiple regression methods. *PloS one*, 15(8), e0237478.
- 10) Salehi, M., Farhadi, S., Moieni, A., Safaie, N., and Ahmadi, H. (2020). Mathematical modeling of growth and paclitaxel biosynthesis in *Corylus avellana* cell culture responding to fungal elicitors using multilayer perceptron-genetic algorithm. *Frontiers in plant science*, 11, 1148.
- 11) Azizi, A., Verchot, J., Moieni, A., and Shams-Bakhsh, M. (2020). Efficient silencing gene construct for resistance to multiple common bean (*Phaseolus vulgaris* L.) viruses. *3 Biotech*, 10(6), 1-10.
- 12) Salmanzadeh, M., Sabet, M. S., Moieni, A., and Homaei, M. (2020). Heterologous expression of an acid phosphatase gene and phosphate limitation leads to substantial production of chicoric acid in *Echinacea purpurea* transgenic hairy roots. *Planta*, 251(1), 1-14.
- 13) Zolfaghari, F., Rashidi-Monfared, S., Moieni, A., Abedini, D., and Ebrahimi, A. (2020). Improving diosgenin production and its biosynthesis in *Trigonella foenum-graecum* L. hairy root cultures. *Industrial crops and products*, 145, 112075.
- 14) Farhadi, S., Sabet, M. S., Malboobi, M. A., and Moieni, A. (2020). The critical role of AtPAP17 and AtPAP26 genes in *Arabidopsis* phosphate compensation network. *Frontiers in plant science*, 11, 565865.

- 15) Sajadi Tabar R., Moieni A., Rashidi Monfared S. (2019) Improving biomass and chicoric acid content in hairy roots of *Echinacea purpurea* L. *Biologia*: 74(8): 941-95.
- 16) Aghaali, Z., Hoshino, Y., Monfared, SR., Moeini A. (2019) Regulation of dedifferentiation and differentiation in different explants of *Papaver rhoeas* L. by one-step culture. *Scientia Horticulturae*. 246: 366-370.
- 17) Salehi M., Moieni A., Safaie N. (2019) Elicitors Derived from Hazel (*Corylus avellana* L.) Cell Suspension Culture Enhance Growth and Paclitaxel Production of *Epicoccum nigrum*. *Scientific Reports*. 8(1):
- 18) Salehi M., Moieni A., Safaie N., Farhadi S. (2019) New synergistic co-culture of *Corylus avellana* cells and *Epicoccum nigrum* for paclitaxel production. *Journal of Industrial Microbiology and Biotechnology*. 46(5), pp. 613-623.
- 19) Salehi M., Moieni A., Safaie N., Farhadi S. (2019) Elicitors derived from endophytic fungi *Chaetomium globosum* and *Paraconiothyrium brasiliense* enhance paclitaxel production in *Corylus avellana* cell suspension culture. *Plant Cell, Tissue and Organ Culture*. 136(1), pp. 161-171.
- 20) Osmani Z., Sabet M.S., Shams-Bakhsh M., Moieni A., Vahabi K. (2019) Virus-specific and common transcriptomic responses of potato (*Solanum tuberosum*) against PVY, PVA and PLRV using microarray meta-analysis. *Plant Breeding*: 138(2), pp. 216-228.
- 21) Jafari, M., Moieni, A., and Shams-bakhsh, M. (2019). The efficiency of the partial genome of Turnip mosaic virus (TuMV) on resistance induction in canola. *Iranian Journal of Plant Protection Science*, 49(2), 165-175.
- 22) Movahedi, Z., and Moieni, A. (2019). Effects of iron chelate and nano chelate on some physiological and morphological characteristics of chicory (*Cichorium intybus* L.) in aeroponic system. *Iranian Journal of Medicinal and Aromatic Plants*, 35(3).
- 23) Moieni, A. (2018). In Vitro Regeneration of Seven Strawberry (*Fragaria× ananassa* Duch.) Genotypes from Seed, Terminal Meristem, Terminal Bud, Leaf and Petiole Explants. *Research and Reviews: Journal of Botanical Sciences*.
- 24) Salehi, M., Moieni, A., and Safaie, N. (2018). Elicitors derived from hazel (*Corylus avellana* L.) cell suspension culture enhance growth and paclitaxel production of *Epicoccum nigrum*. *Scientific reports*, 8(1), 1-10.

- 25) Mirzaee M., Jalali-Javaran M., Moieni A., Zeinali S., Behdani M. (2018) Expression of VGRNb-PE immunotoxin in transplastomic lettuce (*Lactuca sativa* L.) Plant Molecular Biology. 97(1-2), pp. 103-112.
- 26) Mirzaee, M., Jalali-Javaran, M., Moieni, A., Shams-Bakhsh, M., Modarresi, M. (2018) Anti-VEGFR2 nanobody expression in lettuce using an infectious Turnip mosaic virus vector. Journal of Plant Biochemistry and Biotechnology. 27(2), pp. 167-174.
- 27) Kashani K., Jalali Javaran M., Sabet M.S., Moieni A. (2018) Identification of rate-limiting enzymes involved in paclitaxel biosynthesis pathway affected by coronatine and methyl- β -cyclodextrin in *Taxus baccata* L. cell suspension cultures. DARU, Journal of Pharmaceutical Sciences. 26(2): 129-142.
- 28) Movahed, G., Ahmadi, N., and Moieni, A. (2018). The effects of exogenous ethylene on biochemical characteristics and enzymatic activity associated with aging of two ecotypes of Damask rose. *Journal of Crops Improvement*. 19(3).
- 29) Salehi M., Moieni A., Safaie N. (2017) A Novel Medium for Enhancing Callus Growth of Hazel (*Corylus avellana* L.). Scientific Reports 7(1): 1-9.
- 30) Movahed, G., Ahmadi, N., Moieni, A., and Nasiri, A. (2017). Assessment of farming and microscopic of self and cross-incompatibility in tow valuable Damask rose ecotypes.
- 31) Emrani Dehkehan M., Moieni A., Movahedi Z. (2017) Effects of Zeatin riboside, mannitol and heat stress on eggplant (*Solanum melongena* L.) anther culture. Iranian Journal of Genetics and Plant Breeding. 6(1):16-26.
- 32) Emrani Dehkehan, M., Moieni, A., and Movahedi, Z. (2017). Effects of BAP, Kin and NH₄NO₃ concentration on the eggplant anther culture (*Solanum melongena* L.). *Iranian Journal of Field Crop Science*. 48(3), 877-888.
- 33) Movahed, G., Ahmadi, N., Moieni, A., and Nasiri, A. (2017). Field and microscopic studies of self and cross-incompatibility in two Damask rose ecotypes. *Journal of Crops Improvement*. 19(2).
- 34) Jafari, R., Moieni, A., Karimzadeh, Gh., and Movahedi Z. (2017) *In vitro* propagation of Lisianthus (*Eustoma grandiflora*). Journal of Plant Physiology and Breeding. 7(2): 53-65.

- 35) Javadian, N., Karimzadeh, G., Sharifi, M., Moieni, A., and Behmanesh, M. (2017). In vitro polyploidy induction: changes in morphology, podophyllotoxin biosynthesis, and expression of the related genes in *Linum album* (Linaceae). *Planta*, 245(6): 1165-1178.
- 36) Rezai, M., Moieni, A., Dehghani, H., Movahedi, Z. (2017). Effects of paclobutrazol and jasmonic acid on potato minituber production and some plant characteristics in aeroponic cultivation system. *Iranian Journal of Genetics and Plant Breeding*, 6(2):9-19.
- 37) Rahpeyma S.A., Moieni A., Jalali-Javaran M. (2017) Enhancement of paclitaxel content in induced tetraploid *Corylus avellana* L. cell suspension culture with regulating the expression of genes in paclitaxel biosynthetic pathway. *Acta Physiologiae Plantarum*, 39(10): 241-248.
- 38) Khalili, S., Moieni, A., and Abdoli, M. (2017). Investigation of explant and plant growth regulators on callogenesis, indirect shoot regeneration and shoot rooting in *Echinacea angustifolia* DC. *Iranian Journal of Medicinal and Aromatic Plants*, 33(1).
- 39) Bosh, A., Moieni, A., Dehghani, H., Movahedi, Z. (2016). *In Vitro* propagation of Damask rose using the temporary immersion system. *Journal of Plant Physiology and Breeding*, 6(2): 9-18.
- 40) Jafari, M., Shams-Bakhsh, M., and Moieni, A. (2016). Reaction of commercial canola varieties and lines against Turnip mosaic virus (TuMV) isolate. *Iranian Journal of Plant Pathology*, 52(2).
- 41) Jafari, M., Shams-Bakhsh, M., and Moieni, A. (2016). Increased resistance to Turnip mosaic virus in transformed canola (*Brassica napus* L.) by a hairpin (hp) RNA construct.
- 42) Sharifi, P., and Moieni, A. (2016). Effects of some factors on microspore embryogenesis and plantlet regeneration in *Brassica napus* L. *Crop Biotechnology*, 6(13), 13-26.
- 43) Tourang, S., Shams Bakhsh, M., and Moeini, A. (2016). Elimination of Cucumber mosaic virus from gladiolus by meristem tip culture, thermotherapy and electrotherapy. *Agricultural Biotechnology Journal*, 7(4), 35-50.
- 44) Ahmadi, F., Moieni, A., and Monfared, S. R. (2016). Effects of inoculum density and aeration rate on biomass and cichoric acid production in *Echinacea purpurea* L. hairy

- roots in bubble column bioreactor. *Iranian Journal of Medicinal and Aromatic Plants*, 32(3).
- 45) Zamani, M. J., Moieni, A., and Choukan, R. (2016). Effect of temperature stress on androgenesis induction in bell pepper (*Capsicum annuum* L.) by anther culture. *INTERNATIONAL JOURNAL OF ADVANCED BIOTECHNOLOGY AND RESEARCH*, 7(4), 1725-1733.
- 46) Javadian, N., Sharifi, M., and Moieni, A. (2016). In vitro Regeneration of White Flax (*Linum album* Kotschy ex Boiss) Medicinal Plant. *Journal of Plant Research (Iranian Journal of Biology)*, 28(4), 737-745.
- 47) Mirzaee, M., Jalali-Javaran, M., Moieni, A., Zeinali, S., Behdani, M., Shams-Bakhsh, M., and Modarresi, M. (2016). Rapid Recombinant Protein Production using a TuMV-Based Vector in Lettuce (*Lactuca sativa* L.). *International Journal of Advanced Biotechnology and Research*, 7(1), 118-124.
- 48) Jafari, M., Shamsbakhsh, M., and Moieni, A. (2016). DESIGN, PRODUCING AND COMPERING OF EFFICIENCY OF THREE CONSTRUCTS AGAINST TURNIP MOSAIC VIRUS (TUMV).
- 49) Rahpeyma S.A., Moieni A. and Jalali Javaran M. (2015) Paclitaxel production is enhanced in suspension-cultured hazel (*Corylus avellana* L.) cells by using a combination of sugar, precursor, and elicitor. *Engineering in Life Sciences*, 15: 234-242
- 50) Tabatabaiepoor, S. Z., Moieni, A., and Sabet, M. S. (2015). Effect of cryopreservation by vitrification on the growth and development indices of rice zygotic embryos. *Iranian Journal of Field Crop Science*, 46(1).
- 51) Bagheri Toulabi, S., Moieni, A., Ghanati, F. and Emami, F. (2015) Investigation of the Effects of the Basal Medium, Auxin and Antioxidants on the Induction and Maintenance of Callus and Taxol Production in Yew (*Taxus baccata*). *J Adv Biol Biotechnol*, 3 (2), 58-67.
- 52) Kakeshpour, T., Nayebi, S., Rashidi Monfared, S., Moieni, A., and Karimzadeh, G. (2015). Identification and expression analyses of MYB and WRKY transcription factor genes in *Papaver somniferum* L. *Physiology and Molecular Biology of Plants*, 21(4): 465-478. DOI 10.1007/s12298-015-0325-z.

- 53) Rezaei, M., Moieni, A., Dehghani, H., and Movagedi, Z. (2015). Effect of paclobutrazol on mini-tuber production and vegetative characteristics of potato (*Solanum tuberosum* L.) in the aeroponic system. *Journal of Plant Productions (Agronomy, Breeding and Horticulture)*, 38(1), 55-63.
- 54) Rahpeyma, S. A., Moieni, A., and Jalali Javaran, M. (2015). Improvement Of seed Germination of Hazelnut (*Corylus avellana* L.) by Using In Vitro Conditions.
- 55) Boosh, A., Moeini, A., Dehghani, H., and Movahedi, Z. (2015). Design, fabrication and the use of temporary immersion system for micropropagation in Damask rose (*Rosa damascena* Mill.). *Crop Biotechnology*, 4(8), 47-55.
- 56) Hadi, N., Omidbaigi, R., and Moieni, A. (2015). Responses of zygotic embryos of galbanum (*Ferula gummosa* Boiss.) in in vitro conditions.
- 57) Tavizi, A., Javaran, M. J., Moieni, A., Mohammadi-Dehcheshmeh, M., Mohebodini, M., and Ebrahimie, E. (2015). Root and shoot parts of strawberry: factories for production of functional human pro-insulin. *Molecular Biology Reports*, 42(5), 1013-102.
- 58) Mahmodi, P., Moeini, A., Khayam Nekoie, S. M., Mardi, M., and Hosseini Salekdeh, G. (2014). Analysis of saffron stigma (*Crocus sativus* L.) transcriptome using SOAPdenovo and Trinity assembly software. *Crop Biotechnology*, 4(6), 35-46.
- 59) Asgari, M., Javaran, M. J., Moieni, A., Masoumiasl, A., and Abdolinasab, M. (2014). Production of human tissue plasminogen activator (tPA) in *Cucumis sativus*. *Preparative Biochemistry and Biotechnology*, 44(2), 182-192.
- 60) Khalili S., Moieni A., Abdoli M. (2014) Influence of different strains of *Agrobacterium rhizogenes*, culture medium, age and type of explant on hairy root induction in *Echinacea angustifolia* Iranian Journal of Genetics and Plant Breeding. 3(1): 49-56.
- 61) Mashaki, K. M., Moieni, A., and Javaran, M. J. (2014). Investigation on anther culture in Damask rose (*Rosa damascene* Mill.) and miniature rose (*Rosa chinesis*). *Iranian Journal of Medicinal and Aromatic Plants*, 30(1).
- 62) Molsaghi M., Moieni and Kahrizi D. (2014) Efficient protocol for rapid *Aloe vera* micropropagation. *Pharmaceutical biology*, 52(6): 735-739.

- 63) Malaki Choreh J., Moieni A., Dehghani H., Shahvali-Kohshour R. (2014) New findings in strawberry (*Fragaria × ananassa* Duch.) anther culture. Iranian Journal of Genetics and Plant Breeding 3(2):1-7.
- 64) Azadi, P., Moieni, A., and Ahmadi, M. R. (2014). Shoot organogenesis from cotyledons of sunflower/organogenesis de la tallos cotiledones de girasol/organogenese a partir des cotyledons de tournesol.
- 65) Mirzaee M., Moieni A. and Ghanati A. (2013) Effects of drought stress on the lipid peroxidation and antioxidant enzyme activities in two canola (*Brassica napus* L.) cultivars. Journal of Agricultural Science and Technology, 15 (3): 593-602.
- 66) Ekhveh MJ, Moieni A. and Jalali Javaran M. (2013) The evaluation of response to isolated microspore culture in some Iranian hexaploid wheat (*Triticum aestivum* L.) cultivars. Journal of Agricultural Science, 5(7): 206-216.
- 67) Shahvali R., Moieni A. and Baghizadeh A. (2013) Positive effects of cold pretreatment, iron source, and silver nitrate on anther culture of strawberry (*Fragaria × ananassa* Duch.). Plant Biotechnol Rep. 7 (4): 481–488.
- 68) Abdoli M., Moieni A. and Naghdi Badi H. (2013) Morphological, Physiological, Cytological and Phytochemical Studies in Diploid and Colchicine-induced Tetraploid Plants of *Echinacea purpurea* (L.). Acta Physiol Plant 35:2075-2083
- 69) Kohshoor, R. S., Moieni, A., and Baghizadeh, A. (2013). Effect of cultivar, medium and plant growth regulators composition on strawberry (*Fragaria × ananassa* Duch.) anther culture. *Seed and Plant Production Journal*, 29(1), 137-142.
- 70) Abdoli M., Moieni A. and Naghdi Badi H. (2013) Influence of KNO₃, CaCl₂ and MgSO₄ concentrations on growth and cichoric acid accumulation in hairy root culture of purple coneflower (*Echinacea purpurea* L.). Journal of Medicinal Plants, 12 (45): 75-84.
- 71) Movahedi, Z., Moieni, A., and Soroushzadeh, A. (2013). The Effects of Different Concentrations of Nitrogen Sources on Growth of Micropropagated Potato Cultivars. *Journal of Plant Physiology and Breeding*, 3(1), 35-44.

- 72) Asgari M., Jalali Javaran M. Moieni A., Masoumiasl A. (2013) The human tissue-plasminogen activator gene was transformed to cucumber cells. *Minerva Biotechnologica*. 25 (2):75-80.
- 73) Nazary Moghaddam Aghaye R., Yadollahi A., Moieni, A. and Sepahvand S. (2013) In vitro culture of Gisela 6 Semi-dwarf rootstock. *J.Biol. Environ.Sci.* 7(20):57-64.
- 74) Shahvali, K. R., Moieni, A., and Baghizadeh, A. (2013). SCIENTIFIC SHORT ARTICLE: EFFECT OF CULTIVAR, MEDIUM AND PLANT GROWTH REGULATORS COMPOSITION ON STRAWBERRY (*FRAGARIA* × *ANANASSA DUCH.*) ANTHER CULTURE.
- 75) Dolatabadi H.K., Goltapeh E.M., Moieni A. and Varma A. (2012) Evaluation of different densities of auxin and endophytic fungi (*Ospora indica* and *Sebacina vermifera*) on *Mentha piperita* and *Thymus vulgaris* growth. *African Journal of Biotechnology*, 11(7) pp:1644-1650.
- 76) Movahedi, Z. Moieni, A and Souroushzadeh, A. (2012). The Effects of different concentrations of nitrogen sources on growth of micropropagated potato cultivars. *Journal of Plant Physiology and Breeding*.
- 77) Movahedi, Z. Moieni, A and Souroushzadeh, A. (2012). Comparison of aeroponics and conventional soil systems for potato minitubers production and evaluation of their quality characters. *Journal of Plant Physiology and Breeding*.
- 78) Noodezh, H. M., Moieni, A., and Baghizadeh, A. (2012). In vitro propagation of the Damask rose (*Rosa damascena* Mill.). *In Vitro Cellular and Developmental Biology-Plant*, 48(5), 530-538.
- 79) Kashani K., Javaran M.J., Mohebodini M, Moieni A. and Abadi M.S.D. (2012) Regeneration and agrobacterium-mediated transformation of three potato cultivars (*Solanum tuberosum* cv. Desiree, Agria and Marfona) by human proinsulin gene. *Australian Journal of Crop Science*. 6(7): 1212-1220.
- 80) Ghazanfari P., Abdollahi M.R.; Moieni A. and Moosavi S.S. (2012) Effect of plant-derived smoke extract on in vitro plantlet regeneration from rapeseed (*Brassica napus* L. cv. Topas) microspore-derived embryos. *International Journal of Plant Production*. 6(3): 309-324.
- 81) Abdollahi M.R., Ghazanfari P., Corral-Martínez P., Moieni A., Seguí-Simarro J. M (2012) Enhancing secondary embryogenesis in *Brassica napus* by selecting hypocotyls-

- derived embryos and using plant-derived smoke extract in culture medium. *Plant Cell Tiss Organ Cult.* 110(2), pp. 307-315.
- 82) Dolatabadi H.K., Goltapeh E.M., Moieni A., Jaimand K., Sardrood B.P. and Varma A. (2012) Effect of *Piriformospora indica* and *Sebacina vermifera* on plant growth and essential oil yield in *Thymus vulgaris* in vitro and in vivo experiments. *Symbiosis* 53(1) pp: 29-35.
- 83) Pourmohammadi P., Moieni A., Hiraga S. and Komatsu S. (2012) Organ-specific proteomic analysis of drought-stressed soybean seedlings. *Journal of Proteomics.* 75:1906-1923.
- 84) Pourmohammadi P., Moieni A., Komatsu S. (2012) Comparative proteome analysis of drought-sensitive and drought-tolerant rapeseed roots and their hybrid F1 line under drought stress. *Amino acids*,43(5):2137-2152.
- 85) Mohammadi, P. P., Moieni, A., Ebrahimi, A., and Javidfar, F. (2012). Doubled haploid plants following colchicine treatment of microspore-derived embryos of oilseed rape (*Brassica napus* L.). *Plant Cell, Tissue and Organ Culture (PCTOC)*, 108(2), 251-256.
- 86) Karimzadeh, G., Akbari, F., Breeding, M., Moieni, A., Hatami-Maleki, H., and Breeding, P. (2012). Karyotypic variation in some rapeseed (*Brassica napus*) cultivars using multivariate analysis. *Agronomy Journal*.
- 87) Shirdelmoghanloo, H., Moieni, A., and Mousavi, A. (2011). Effects of Cultivar, Pretreatment and Embryo Induction Medium in Isolated Microspore Culture of Hexaploid Wheat (*Triticum aestivum* L.).
- 88) Bayati Sh., Shams-Bakhsh M. and Moieni A. (2011) Elimination of grapevine a (GVA) by cryotherapy and electrotherapy. *J. Agr. Tech.*,13: 443-450.
- 89) Khavari, K. S., Moieni, A., Mousavi, A., and Golbashi, M. (2011). Study on embryogenesis response of maize (*Zea mays* L.) genotypes to anther culture.
- 90) Sharifi, P., and Moieni, A. (2011). The effects of photoperiod on embryogenesis of microspore culture in three spring rapeseed cultivars. *Crop Research*, 3(92),95-102.
- 91) Abdollahi, M. R., Moieni, A., Mousavi, A. A., and Salmanian, A. H. (2011). High frequency production of rapeseed transgenic plants via combination of microprojectile

- bombardment and secondary embryogenesis of microspore-derived embryos. *Molecular biology reports*. 38(2), 711-719.
- 92) Yadollahi A. Abdollahi MR. Moieni A and Danaee M (2011) Effects of carbon source, polyethylene glycol and abscisic acid on secondary embryo induction and maturation in rapeseed (*Brassica napus* L.) microspore-derived embryos. *Acta Physiol Plant* (33):1905-1912.
- 93) Pourmohammadi P., Moieni A., Ebrahimi A. and Javidfar F (2011) Doubled haploid plants following colchicines treatment of microspore-derived embryos of oilseed rape (*Brassica napus* L.). *Plant Cell Tiss Organ Cult.*108(2): 251-256.
- 94) Dolatabadi, H. K., Goltapeh, E. M., Moieni, A., Jaimand, K., Sardrood, B. P., and Varma, A. (2011). Effect of *Piriformospora indica* and *Sebacina vermifera* on plant growth and essential oil yield in *Thymus vulgaris* in vitro and in vivo experiments. *Symbiosis*. 53(1), 29-35.
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IX. Papers Presented in Conferences:

Pourmohammadi P., Moieni A., and Komatsu S. (2011) Proteomic analysis of leaf, hypocotyls and root in soybean seedlings under drought-stress. 3rd international symposium on frontiers in agriculture Proteome research, 8-12 Nov. Takezono, Japan .

Hadi N., Moieni A and Omidbaigi R. (2011) Responses of zygotic embryos of galbanum in *in vitro* conditions. 59th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research. Turkey.

Sepahpour Sh., Moieni A., Baghizadeh A. and Shamsbakhsh M. (2009) Effects of electric current value and time treatments on *elimination* of carnation motle virus and *in vitro* plantlet regeneration of carnation (*Dianthus caryophyllus*). Acta Hort.,829: 395-398.

Abdollahi M.R., Moieni A., Mousavi A., Salmanian A.H.. (2008) Effect of integrated microprojectile bombardment and secondary embryogenesis for generating doubled haploid transgenic plants in rapeseed (*Brassica napus* L). Paris, France.

Sepahpour Sh., Moieni A., Baghizadeh A. and Shamsbakhsh M. (2008) The effects of electric current value and time treatments on *in vitro* plant growth and regeneration of carnation (*Dianthus caryophyllus*). Sixth International Symposium on *in vitro* Culture and Horticultural Breeding, 24-28 August, Brisbane, Queensland, Australia.

Bagheri Kh., Jalali Javaran M., Mahboudi F., **Moieni A.** and Zebarjadi A. (2007) Transformation of *Brassica napus* with construct of fusion gene (oleosin-gamma interferon). The 6th Asian Crop Science Association Conference and The 2th international Conference on Rice for the Future. 5-9 November, Bangkok, Thailand.

Mansouri N., **Moieni A.** and Khosroshahli M. (2007) Improvement in normal plant regeneration from microspore-derived embryos in *Brassica napus* L. The 6th Asian Crop Science Association Conference and The 2th international Conference on Rice for the Future. 5-9 November, Bangkok, Thailand.

Saharkhiz M.J, Omidbaigi, R and **Moieni A.** (2007). Determination of genomic DNA of feverfew (*Tanacetum parthenium* L.) in diploid and tetraploid situations. Proceedings of 5 the 5 th Iranian Horticultural Sciences Congress.3-6 Sep. Shiraz University, Shiraz, Iran

Mortazavi, M.H. Arzani, K.and **Moieni. A.** (2006) The effects of some chemicals on in vitro pollen germination of three male date cultivars, 27th international horticultural congress 7 exhibition, Seoul, Korea.

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Ebadi A, **Moieni A** and Bozorgipour R (2001) The response of anther culture in several genotypes of Iranian spring wheat (*Triticum aestivum*). The second international Iran and Russia conference “ Agriculture and Natural Resources”, Moscow, Russia.

Moieni A. Azadi P. and Ahmadi MR (2001) Plant regeneration from cotyledons of sunflower. The second international Iran and Russia conference “ Agriculture and Natural Resources”, Moscow, Russia

Rouzban MR, Arzani K and **Moieni A** (2001) Plant regeneration via lateral buds of Asian pear under in vitro conditions. The second international Iran and Russia conference “ Agriculture and Natural Resources”, Moscow, Russia.

Moieni A. and Sarrafi A. (1994) Role du genom “D” dans la regeneration haploide du croisement “ ble × mais “. Quel avenir pour l’amelioration des plantes ? Ed.AUPELF-UREF.John Libbey Eurotext. , Paris, pp : 331-336

X. Research Students Supervised:

M.Sc. Students:

- 1) Ebadi, A.A., Genetic analysis for haploid regeneration responses of hexaploid wheat (*Triticum aestivum* L.) anther culture, 1999.
- 2) Kahrizi, D.: Effect of donor plant genotype and media composition on androgenesis (anther culture) of hexaploid wheat (*Triticum aestivum* L.), 1999.
- 3) Bagheri H., Study of response to isolated microspore culture in some rapeseed (*Brassica napus* L.) genotypes, 2000.
- 4) Abedini E., Study of androgenesis in barley, 2001.
- 5) Azadi P., Plant regeneration from cotyledons of sunflower (*Helianthus annuus* L.) via direct organogenesis, 2001.
- 6) Abdollahi M., Effect of some factors on embryo induction and plant regeneration in isolated microspore culture of rapeseed (*Brassica napus* L.), 2002.
- 7) Mohammadi M., Study on resistance to yellow rust (*Puccinia striiformis*) in hexaploid wheat (*Triticum aestivum* L.) doubled haploid lines and in their donor plants, 2002.
- 8) Khonji, Y. : Study on Androgenesis in some Rapeseed (*Brassica napus* L.) and Hexaploid wheat (*Triticum aestivum* L.) cultivars, 2002.
- 9) Abdoli M., Study on some factors affecting plant regeneration of mature sunflower (*Helianthus annuus* L.) cotyledons, 2003.
- 10) Ekhvah, MJ: Response to microspore culture in some spring wheat cultivars, 2008.
- 11) Jahanipour P., Optimization of plantlet regeneration in isolated microspore culture of rapeseed (*Brassica napus* L.), 2004.
- 12) Sharifi P., Optimization of embryogenesis and plant regeneration in isolated microspore culture of rapeseed (*Brassica napus* L.), 2004.
- 13) Haddadi P., Effects of Gibberellin, Abscisic Acid and Embryo Desiccation and type of container on plant regeneration in isolated microspore culture of rapeseed (*Brassica napus* L.), 2005.
- 14) Shirdelmoghanloo H., Effects of genotype, growth conditions of donor plants, pretreatment and embryo induction media in isolated microspore culture of wheat (*Triticum aestivum* L.), 2007.
- 15) Rahpeima S., Study of anther culture in rose (*Rosa hybrida* and *Rosa miniatures*), 2007.
- 16) Sepahpoor, Sh., Comparison of methods to eliminate Carnation Mottle Virys (CarMV) from *Dianthus caryophyllus*, 2008.
- 17) Mahmoudi Noodezh, Haleh: *In vitro* optimization of shoot proliferation and rooting in Damask Rose (*Rosa damascena* Mill.), Dec. 2008.
- 18) Maleki Choreh, J.: Study on anther culture in some cultivars of strawberry (*Fragaria* × *ananassa* Duch.), 2009.

- 19) Naghsh M., Study on strawberry (*Fragaria × ananassa* Duch. cvs. Pajaro and Paros) meristem culture in runners and in vitro plantlets, 2009.
- 20) Mirzaee, M., Effect of drought stress on germination and seedling growth in some canola (*Brassica napus* L.) cultivars, 2010.
- 21) Shahvali Kohshoor, R., Study on the effects of cold pretreatment, silver nitrate and amino acids on strawberry (*Fragaria × ananassa* Duch.) anther culture, 2011.
- 22) Jafari, R., Investigation of in vitro shoot proliferation and rooting in lisianthus plant (*Eustoma grandiflorum*), 2011.
- 23) Mahdavi Mashaki, K.: Effect of medium composition on anther culture in *Rosa damascena* Mill. And Rose (cultivar Sanaz), 2011.
- 24) Kiani, d.: Effects of pretreatments on anther culture in *Rosa damascena* Mill. and *Rosa hybrida*, 2011.
- 25) Molsaghi, M.: Study of micropropagation and autoploidy in *Aloe vera* (*Aloe barbadensis*), 2011.
- 26) Bordbar L.,: *In vitro* improvement of shoot proliferation in Damask Rose (*Rosa damascena* Mill.),
- 27) Hesabi H., *In vitro* optimization of shoot proliferation in Damask Rose (*Rosa damascena* Mill.), 2011.
- 28) Rahimian N., Evaluation of yield and efficiency of virus elimination methods in the early generations (V₀ and V₁) of the produced virus-free plant in two commercial potato (*Solanum tuberosum* L.) cultivars, 2013.
- 29) Tabatabaie poor, Z., Cryopreservation of rice (*Oryza sativa* L.) zygotic embryos, 2014.
- 30) Moghaddam, F., Investigation of elicitation in suspension cell culture of yew (*Taxus baccata*),

Ph.D. Students:

- 1) Abdollahi M., Applications of androgenic haploids in production of transgenic rapeseed (*Brassica napus* L.) plant, 2008.
- 2) Khavari Khorasani S., Study of androgenesis and culture of immature zygotic embryos in some of maize genotypes and the use of haploidy for gene transfer, 2006.
- 3) Mirzaie Asl, A., Transformation of herbicide glyphosate resistant gene into sugar beet and molecular analysis of transgenic plants, 2009.
- 4) Movahedi, Z, Assessment of effect of cultivar and environmental factors on in vitro potato plantlets on minituber production in aeroponic conditions, 2012.
- 5) Pourmohammadi P., Identification of molecular markers and proteins link to drought stress tolerance in doubled haploid lines of rapeseed (*Brassica napus* L.), 2012.
- 6) Salehi M. The potential of hazelnut (*Corylus avellana*) cell suspension culture for paclitaxel production using taxol-producing endophytic fungus, 2018.

- 7) Gharanjik Sh., Investigation of the isolated microspore culture in some of hexaploid wheat and the transfer of the reporter gene uidA to androgenic haploid materials, 2008.
- 8) Zamani J., Androgenesis (Anther and Isolated Microspore Culture) of commercial bell pepper (*Capsicum annuum* L.) hybrids, 2016.
- 9) Rahpeima SA., Improved anticancer drug taxol in hazelnut (*Corylus avellana* L.) suspension culture via induced polyploidy and combination of inducing factors, 2014.

XI. Research Students Co-Supervised:

- 1) Tehrani, S.: Study of secondary embryogenesis in rapeseed (*Brassica napus* L.) microspore-derived embryos, 2008.

