

As Surname: Iranbakhsh

First Name: Alireza

Date of Birth: November 22, 1967

Place of Birth: Tehran, IRAN

Marital Status: Married with two children

Language: Persian and English

Academic Rank: Full Professor

Affiliation: Department of Biology, Science faculty, Science and Research Branch, Islamic Azad University.



Scopus Author ID: [15062745400](https://orcid.org/0000-0001-5879-0613)

orcid.org/0000-0001-5879-0613

1. CONTACT INFORMATION

Email: iranbakhshar@yahoo.com; iranbakhsh@iau.ac.ir

Mailing Address: Department of Biology, Science faculty, Science and Research Branch, Islamic Azad University, Daneshgah Sq., Sattari Hwy, Tehran/Iran.

Phone: +989121487477

2. EDUCATION

1995- 1999; Ph.D. in Biology, Plant Sciences; Plant Cell and Development (GPA: 18.10/ 20), Islamic Azad University, Tehran Sciences and Research Branch, Tehran, IRAN

Dissertation: Investigation on the Mechanisms, Period, and Location of Biosynthesis of Atropine Alkaloids *In Vitro* Plants of *Datura stramonium* L.

Supervisor: Prof. Ahmad Majd – Prof. Gholam Hossein Riazi

1992 – 1995; M.S. in Biology, Plant Sciences; Plant Cell and Development (GPA: 18.44/20), Islamic Azad University, Tehran North Branch, Tehran, IRAN.

Thesis: Structure and Ultra Structure of Atropine Biosynthetic Cells in *Atropa belladonna* L.

Supervisor: Prof. Ahmad Majd

1986 –1990; B.S. in Biology (GPA: 16.18 / 20), University of Kharazmi, Tehran, IRAN

3.PUBLICATIONS

a) Published Articles in English

1. **Alireza Iranbakhsh, Zahra Oraghi Ardebili, Narges Oraghi Ardebili (2019)** Book chapter Zinc oxide nanoparticle impact on plants: Physiological and biochemical responses. Springer under process Submitted
2. **Alireza Iranbakhsh, Zahra Oraghi Ardebili, Narges Oraghi Ardebili (2019)** Chapter 26: Gene regulation by NO in plants. Elsevier under process Submitted
3. **Masoumeh Ghasempour Alireza Iranbakhsh, PhD Mostafa Ebadi, Zahra Oraghi Ardebili (2019)** Multi-walled carbon nanotubes improved growth, anatomy, physiology, secondary metabolism, and callus performance in *Catharanthus roseus*: an in vitro study. 3Biotech submitted
4. **Soudeh Ghorbani, Alireza Iranbakhsh, Mostafa Ebadi, Zahra Oraghi Ardebili (2019)** Multi-walled carbon nanotubes exhibited elicitor and hormone-like activities in *Salvia nemorosa*. Turkish Journal of Botany submitted
5. **Alireza Iranbakhsh, Zahra Oraghi Ardebili, Hedieh Molaei, Narges Oraghi Ardebili, Maryam Amini (2019)** Cold plasma induced expressions of WRKY1 transcription factor and genes involved in biosynthesis of cannabinoids in Hemp (*Cannabis sativa* L.). Industrial crops and products submitted
6. **Rayan Partovi, A Iranbakhsh, Masoud Sheidai, Mostafa Ebadi (2019)** Population genetic studies in wild olive (*Olea cuspidata*) by molecular barcodes and SRAP molecular markers. Submitted
7. **Zahra Moradi Tarnabi, Alireza Iranbakhsh, Taher Nejad Sattari, Iraj Mehregan, Rahim Ahmadvand (2019)** Impact of arbuscular mycorrhizal fungi (AMF) on expression of some cell wall and membrane elements of wheat (*Triticum aestivum* L.) under water deficit using transcriptome analysis. Physiol. Mol. Plant Biol accepted
8. **Alameh Babajani, Alireza Iranbakhsh, Zahra Oraghi Ardebili (2019)** Zinc oxide and elemental selenium nanoparticles modified metabolism and transcription pattern in Lemon balm. Journal of Plant Growth Regulation submitted
9. **Reza Soleymanzadeh, Alireza Iranbakhsh, Ghader Habibi, Zahra Oraghi Ardebili (2019)** Selenium nanoparticle protected strawberry against salt stress through modifications in salicylic acid, ion homeostasis, antioxidant machinery, and photosynthesis performance. submitted

- 10.Reza Soleymanzadeh, Alireza Iranbakhsh, Ghader Habibi, Zahra Oraghi Ardebili (2019)** Soil supplementation with silicon nanoparticle modified salicylic acid, ascorbate, antioxidants, and nutrition through which mitigated toxicity signs of salinity in Strawberry. submitted
- 11.Fereshteh Sadat Seddighinia, Alireza Iranbakhsh, Zahra Oraghi Ardebili, Taher Nejadstari, Saman Soleimanpour (2019)** Seed priming with cold plasma and carbon nanotube enhanced carotenoid contents and expression of PSY and PDS genes in *Momordica charantia*. 3Biotech submitted
- 12.Alameh Babajani, Alireza Iranbakhsh, Zahra Oraghi Ardebili, Bahman Eslami (2019)** Seed priming with non-thermal plasma modified plant reactions to selenium or zinc oxide nanoparticles: cold plasma as a novel emerging tool for plant science. Plasma Chemistry and Plasma Process39: 21-34
- 13.Alameh Babajani, Alireza Iranbakhsh, Zahra Oraghi Ardebili, Bahman Eslami (2019)** differential growth, nutrition, physiology, and gene expression in *Melissa officinalis* mediated by zinc oxide and elemental selenium nanoparticles. Environmental Science and Pollution Research. <https://doi.org/10.1007/s11356-019-05676-z>
- 14.Maryam Moghanloo, Alireza Iranbakhsh, Mostafa Ebadi, Taher Nejad Satari, Zahra Oraghi Ardebili (2019)** Seed priming with cold plasma and supplementation of culture medium with silicon nanoparticle modified growth, physiology, and anatomy in *Astragalus fridae* as an endangered species Acta Physiologia Plantarum 41:54
- 15.Maryam Moghanloo, Alireza Iranbakhsh, Mostafa Ebadi, Taher Nejad Satari, Zahra Oraghi Ardebili (2019)** Differential physiology and expression of Phenylalanine ammonia lyase (PAL) and Universal stress protein (USP) in the endangered Species *Astragalus fridae* following Seed priming with cold plasma and manipulation of culture medium with silica nanoparticles. Plant Cell, 3Biotech 9: 288. <https://doi.org/10.1007/s13205-019-1822-5>
- 16.Fereshteh Sadat Seddighinia, Alireza Iranbakhsh, Zahra Oraghi Ardebili, Taher Nejadstari, Saman Soleimanpour (2019)** Seed Priming with Cold Plasma and Multi-walled Carbon Nanotubes Modified Growth, Tissue Differentiation, Anatomy, and Yield in Bitter melon (*Momordica charantia*). Journal of Plant Growth Regulation <https://doi.org/10.1007/s00344-019-09965-2>

- 17.N. Oraghi Ardebili, A. Iranbakhsh, Z. Oraghi Ardebili (2019)** Efficiency of selenium and salicylic acid protection against salinity in soybean. Iranian Journal of plant physiology 9(2):2727-2738.
- 18.Roghayyeh Babri-Bonab, Sara Saadatmand, Hossein Nazemiyeh, and Alireza Iran-Bakhsh (2018)** The effect of different concentrations of exogenous nitric oxide on several physiological and biochemical parameters in NaCl-stressed coriander (*Coriandrum sativum* L.). Iranian Journal of Plant Physiology 8 (4), 2517- 2524.
- 19.Farnaz Tahoori, Ahamd Majd, Taher Nejdattari, Hamideh Ofoghi, Alireza Iranbakhsh (2019)** Qualitative and Quantitative Study of Quercetin and Glycyrrhizin in In Vitro Culture of Liquorice (*Glycyrrhiza glabra* L.) and Elicitation with AgNO₃. Notulae Botanicae Horti Agrobotanici 47(1): 143-151
- 20.Farnaz Tahoori, Ahamd Majd, Taher Nejdattari, Hamideh Ofoghi, Alireza Iranbakhsh 2018** Effects of silver nitrate (AgNO₃) on growth and anatomical structures of vegetative organs of liquorice (*Glycyrrhiza glabra* L.) under in vitro condition. Plant Omics 11 (3): 153-160
- 21.Jafari, M., Saadatmand, S. – ZANGI, M. R., Iranbakhsh, A. R.(2018)** effect of pic (mepiquat chloride) on the salinity resistance of new cultivars of cotton (*Gossypium hirsutum*) in the seedling stage. Applied Ecology and Environmental Research 16(4):4097-4114.
- 22.E Sadeghirad, A Majd, A Iranbakhsh & A Javanshah 2018** Male gametophyte development steps in *Pistacia vera*. Nusantara Bioscience 10(3): 151-158
- 23.Vadaye Kheiry E, Parivar K, Baharara J, Fazly Bazzaz BS, Iranbakhsh AR. 2018**The osteogenesis of bacterial cellulose scaffold loaded with fisetin. Iranian Journal of Basic Medical Sciences 21:965-971.
- 24.Alireza Iranbakhsh, Zahra Oraghi Ardebili, Narges Oraghi Ardebili, Mahmood Ghoranneviss, Nasrin Safari(2018)**Non-thermal plasma relieved toxicity signs of nano zinc oxide in *Capsicum annuum* cayenne via modifying growth, differentiation and physiology. Acta Physiologia Plantarum 40: 154
- 25.Safari M., Oraghi Ardebili Z., IranbakhshA. (2018)**Selenium nano-particle induced alterations in expression patterns of heat shock factor A4A (HSFA4A), and high molecular weight glutenin subunit 1Bx (Glu-1Bx) and enhanced nitrate reductase activity in wheat (*Triticum aestivum* L.). Acta Physiologia Plantarum 40: 117-124.

- 26.H. Nazerieh, Z.Oraghi Ardebili, Alireza Iranbakhsh (2018)** Potential benefits and toxicity of nanoselenium and nitric oxide in peppermint. *Acta Agriculturae Slovenica* 111 (2):357-368
- 27.Alireza Iranbakhsh, Narges Oraghi Ardebili, Zahra Oraghi Ardebili, Mohammadreza Shafaati, Mahmood Ghorannevis (2018)** Non-thermal plasma improved wheat (*Triticum aestivum*) growth and resistance against salinity via inducing expression of HSFA4A. *Plasma Chemistry and Plasma Process* 38 (1): 29-44; DOI 10.1007/s11090-017-9861-3
- 28.Ghasem Asgari-Targhia, Alireza Iranbakhsha, Zahra Oraghi Ardebili (2018)**Potential benefits and phytotoxicity of bulk and nano-chitosan on the growth, morphogenesis, physiology, and micropropagation of *Capsicum annuum*. *Plant Physiology and Biochemistry* 127:393-402.<https://doi.org/10.1016/j.plaphy.2018.04.013>
- 29.Kazhal Haddadian, Alireza Iranbakhsh, Ramazan Ali Khavari-Nejad, Mahmood Ghoranneviss (2018)**Copper nanoparticles together with cold atmospheric plasma improves the growth and physiological indices of *Dracocephalum moldavica* in hydroponic system. *South Asian Journal of Experimental Biology* 7 (3): 130-139.
- 30.E Sadeghirad, A Majd, A Iranbakhsh & A Javanshah 2017**The Effect of NaCl on Anther Development in *Pistacia vera* L. *Journal of Molecular Biology Research* 7(1):132-142
- 31.Elahe Vadaye Kheiry, Kazem Parivar, Javad Baharara, Alieza Iranbakhsh 2017**The Osteogenic Differentiation of Mice Bone Marrow Mesenchymal Stem Cells with *Fisetin Phytoestrogen*. *Journal of Molecular Biology Research* 7(1):162-170
- 32.E. Moallem, A. Ghasemipirbalouti, T. Nejdassattari, A. Iranbakhsh, I. Mehregan (2017)** Evaluation of expression analysis of putrescine n-methyltransferase gene during different stages of growth in the medicinal plant *Physalis divaricata* (Solanaceae). *Biodiversitas* 18 (4): 1430-1437.
- 33.Mehdi Mohamadian Sarcheshmeh, Saeed Rezaee, Ebrahim Shokoohi and Alireza Iranbakhsh (2017)** Investigation on the interaction between *Meloidogyne javanica* and *Fusariumoxysporum* f.sp. *radicis-cucumerinum* on cucumber cultivars under greenhouse conditions.

- 34.M Jafari, S Saadatmand, M Zangi, A Iranbakhsh (2017)**the effect of growth regulators mepiquat chloride on the salinity resistance of the new cultivars of cotton (*Gossipium hirsutum* L) in the seedling stage, Helix in press
- 35.N. Safari, A. Iranbakhsh, Z. Oraghi Ardebili (2017)**Non- thermal plasma modified growth and differentiation process of *Capsicum annum* PP805 Godiva in in vitro conditions. Plasma Science and Technology 19 (5): 055501
- 36.A. Iranbakhsh, M. Ghoranneviss,Z. Oraghi Ardebili, N. Oraghi Ardebili, S. Hesami Tackallou and H. Nikmaram(2017)**Non-thermal plasma modified growth and physiology in *Triticum aestivum* via generated signalling molecules and UV: plasma as a new approach to plant science, Biologia Plantarum61(4): 702–708. DOI: 10.1007/s10535-016-0699-y
- 37.Sormeh Gharehmatrossian, Popov Yu, Ghorbanli Mahlagha , Safaeian Shila, Alireza Iranbakhsh (2016)** Phytochemical and Morphological Evidences for Shikonin Production by Plant Cell Cultures of *Onosma sericeum* Willd. Brazilian Archives of Biology and Technology 59: e16160235.
- 38.Jazinizadeh, E., Zarghami, R., Majd, A., Iranbakhsh, A., Tajaddod, G.(2015).** *In vitro* production of date palm (*Phoenix dactylifera* L.) cv. Barhee plantlets through direct organogenesis. Biological Forum- An International Journal (In Press).
- 39.Babri Bonab, R., Saadatmand, S., Nazemiyeh, H., Iranbakhsh, A.R. (2015).** Alleviation Effects of Nitric Oxide on the Growth Rate and Photosynthetic Pigments and Reducing Sugar Content in NaCl-Stressed Coriander (*Coriandrumstativum* L.). J. Appl. Environ. Biol. Sci. 5(9S): 577-585.
- 40.Khaje-khaki, M., Iranbakhsh, A., Rouzbahani, A., & Baghi, M. (2014).** Evaluation of integrating mechanical and chemical methods of weeds control on yield and yield components of corn (*Zea mays* L.). *International Journal of Advanced Biological and Biomedical Research*32(4): 1168-1173.
- 41.Niakan, M., Darvishkhezri1, M., Iranbakhsh, A.,& Barzegar, A. (2013).** Changes of Sorghum growth in response to drought and allelopathy stresses. *Annals of Biological Research.* 4 (6), 18-22.
- 42.Zare, Z., Majd, A., Iranbakhsh, A.,& Mehrabian, S. (2012).** Antimicrobial activity extracts of *Lippia nodiflora* L. (*Verbenacea*), *Journal of Plant Protection Research*, 52(4), 401-403.

- 43. Iranbakhsh, A., Ebadi, M. & Zare, Z. (2011).** Effects of Nitrogen and Potassium on in vitro Microtuberization of Potato (*Solanum tuberosum* L.) Var Agria. *Australian Journal of Basic and Applied Sciences*, 5(12), 442-448.
- 44. Goodarzi, B., Iranbakhsh, A., Rezaeshirazi, R. & Khosravi, A. (2011).** The Effects of Simultaneous 7 weeks oral supplementation with antioxidant vitamin (E) and aerobic exercise on lipid peroxidation in erythrocytes after a Bout acute exhaustive treadmill exercise in rats, *Australian Journal of Basic and Applied Sciences*, 5(12), 429-432.
- 45. Goodarzi, B., Iranbakhsh, A., Rezaeshirazi, R., & Khosravi, A. (2011).** The Effect of an Eight-Week Administration of Crocus Sativus Extract and Vitamin C on Inflammatory Indices and Oxidative Stress in Wistar Rats, *Health MED* 6, 115-119.
- 46. Afshari, H., Iranbakhsh, A., Ebadi, A.G. & Abbaspour, H. (2011).** Determination of Dieldrin Residue in Some Vegetables from Damghan City Market (Semnan Province in Iran), *Middle-East Journal of Scientific Research*, 9(4), 561-565.
- 47. Afshari, H., Iranbakhsh, A., Ebadi, A.G. & Abbaspour, H. (2011).** The Survey and Measurement of Residues of DDT (Organochlorine Pesticide) in Some Consumed Vegetables from Damghan City Market (Semnan Province of Iran), *America-Eurasian Journal of Toxicological Sciences*, 3(3), 208-212.
- 48. Ebadi, M. & Iranbakhsh, A. (2011).** The induction and growth of potato (*Solanum tuberosum* L.) microtubers (Sante cultivar) in response to the different concentrations of 6-benzylaminopurine and sucrose. *African Journal of Biotechnology*, 10(52), 10626-10635.
- 49. Zare, Z., Majd, A., Nejad Sattari, T., Iranbakhsh, A. & Mehrabian, S. (2011).** The Comparative Study of Antimicrobial Activity of Leaves and Flowers Methanolic Extracts of *Lippia citriodora* H.B.K (*Verbenacea*), *American-Euroasian Journal of Agricultural & Environmental Sciences*, 10(5), 901-905.
- 50. Iranbakhsh, A., & Seyyedrezaei, S.H. (2011).** The Impact of Information Technology in Biological Sciences, *Procedia of Computer Science*, 3, 913-916.
- 51. Hamdi, S. M. M., Asadi, M., & Iranbakhsh, A. (2010).** Micromorphological studies on leaf, fruit and pollen four species from *Typhaceae* (*Typha laxmannii*, *T. azerbaijanensis*, *T. minima* and *T. lugdunensis*) from Iran, and their Systematic significance, *Acta Biologica Szegediensis*, 54(2), 117-125.

- 52. Iranbakhsh, A., Ebadi, M., & Bayat, M. (2010).** The Inhibitory Effects of Plant Methanolic Extract of *Datura stramonium* L. and Leaf Explant Callus against Bacteria and Fungi, *Global Veterinaria*, 4(2), 149-155.
- 53. Farahvash, F., & Iranbakhsh, A. (2009).** Effects of tuber size and date of stem cutting on yield and yield components of Agria Potato variety in East Azerbaijan, *Journal of Horticulture and Forestry*, 1(4), 57-60.
- 54. Iranbakhsh, A., Ebadi, M., & Bakhshi Khaniki, G. (2007).** The Ontogenetic Trends of Microtuber Formation in Potato (*Solanum tuberosum* L.), *Pakistan Journal of Biological Sciences*, 10(6), 843-851.
- 55. Iranbakhsh, A., Oshaghi, M. A., Ebadi, M. (2007).** Growth and Production Optimization of Tropane Alkaloids in *Datura stramonium* Cell Suspension Culture, *Pakistan Journal of Biological Sciences*, 10(8), 1236-1242.
- 56. Ebadi, M., Iranbakhsh, A., Bakhshi Khaniki, G. (2007).** Shoot Micropropagation and Microtuberization in Potato (*Solanum tuberosum* L.) by the Semi-Continuous Bioreactor, *Pakistan Journal of Biological Sciences*, 10(6), 861-867.
- 57. Iranbakhsh, A., Oshaghi, M. A., Majd, A. (2006).** Distribution of Atropine and Scopolamine in Different Organs and Stages of Development in *Datura stramonium* L. (*Solanaceae*) Structure and Ultrastructure of biosynthesizing Cells. *Acta Biologica Cracoviensia*, 48(1), 13-18.

b) Published Articles in Persian

- 1- **B Zaji, R Khavarinejad, S Saadatmand, A. Iranbakhsh (2019)** Some of the morphological and physiological responses of the herbaceous plant (*Dracocephalum moldavica* L.) to selenium under salt stress. *Plant Ecophysiological Research Submitted*
- 2- **J. Ghorbani, A. Iranbakhsh, A. Mhuzi (2019)** Social critique in the poetry of Sohrab Sepehri and its adaptation to the basic sciences. *Comparative Literature Studies* 36(9): 51-60
- 3- **Zare, Z, Iranbakhsh, A., Ebadi, M. (2018)** effects of different concentrations of Ca and Mg on cellular changes in potato microtubes in in vitro condition. *Developmental Biology Journal submitted*

- 4- **L. Gazi Zadeh, P. Ehsani, A. Iranbakhsh (2018)** Structure of transgenic and nontransgenic hairy roots of *Luffa cylindrical*. *Developmental Biology Journal* 10 (2): 22-29
- 5- **Haji bagheri S., Abaspour H., Enteshari S., Iranbakhsh A., Habibolahi S., 2018** the effects of mycorrhiza and brassinosteroids on the photosynthesis of *Pimpinella anisum* under cadmium stress. *Developmental Biology Journal* 10(3): 55-71
- 6- **Jafari, M., Saadatmand, S. – ZANGI, M. R., Iranbakhsh, A. R. (2017)** effect of pix (mepiquat chloride) on the growth characteristics in new cultivars of cotton (*Gossypium hirsutum* L.) grown under salinity condition. *Developmental Biology Journal* 9 (4): 37-52.
- 7- **Zamani P., Baharara J., Iranbakhsh A., Ramezani T. (2017).**The effect of silver nanoparticles covered with the *Achillea biebersteinii* plant extract on angiogenesis of chick chorioallantoic membrane. *Feyz* 21 (6): 553-561.
- 8- **Shdiani S, J Baharara, A Iranbakhsh, T Ramezani 2017** Investigating the effect of Sulforaphane on Angiogenesis in Chick's Chorioalantoic membrane and its antioxidant properties. *Journal of Birjand University of Medical Sciences*. 24 (3): 1-12
- 9- **Zamani P., Baharara J., Iranbakhsh A., Ramezani T. (2017).**The effects of scopolamine and green-synthesized silver nanoparticles on angiogenesis in the chicken embryo chorioalantoic curve model. *Developmental biology journal* 3: 1-12.
- 10- **Elham Moallem, Abdollah Ghasemipirbalouti, Taher Nejadstari, Alireza Iranbakhsh, Iraj Mehregan(2017).**Variation in the amount of alkaloids in different organs of the *Physalis divaticata* at the end stage of flowering. *Eco-phytochemical Journal of Medicinal Plants*, Accepted
- 11- **Hajibabaie M., Baharara J., Iranbakhsh A., Ramezani T. (2017).**The effects of silver nano-particles coated with silymarin on angiogenesis in chick chorioallantoic membrane and evaluate its antioxidant activity. *Razi Journal of Medical sciences* 23 (152): 54-64
- 12- **Motie M, Baharara J., Iranbakhsh A. (2016).** The effects of simultaneous applications of nano-silver and electromagnetic waves of low frequency on chicken embryo. *Journal of medicinal sciences, yazad university*, 24(4) 317-328
- 13- **Fargi Neda, Alireza Iranbakhsh, Mohammad Hamdi 2015** The anatomical studies of stem, leaf and rhizome and pollen of *Polygonatum*, in Iran. *Developmental biology journal* 4: 55-67.

- 14- **Alireza Iranbakhsh, Lak N., Fahimi H. (2015).**The effect of nickel on seed germination and seedling growth of *Brassica napus*. *Developmental biology journal* 4(4): 31-38.
- 15- **Khorasani N.,Baharara J., Iranbakhsh A., Ramezani T. (2015).**Apoptotic effects of silver nanoparticles coated with *Zataria multiflora* leaves extract on HepG2 cell lines. *Feyz* 19(6): 457-467.
- 16- **Safari L., Iranbakhsh A., CalagariM.(2015).** The anatomical studies of *Populous euphratica*, *Populous alba* and their hybrids in Karadj and Garmsar regions of Iran. *Developmental biology journal*6(1): 21-29.
- 17- **Darvishzadeh F., Nejatizadeh F., Iranbakhsh A.(2015).** Effects of silver nanoparticles on salinity tolerance in basil plant (*Ocimum basilicum* L.) during germination in vitro. *New Cellular and Molecular Biotechnology journal*5(20): 63-70.
- 18- **Iranbakhsh A, Niakan M, Hosseini S.D.(2015).** The effect of exogenous quercetin and ascorbate on Oat grown under different salinity levels. *Crop Physiology Journal* 24: 19-28.
- 19- **Zandi S., Majd A., Iranbakhsh AR. (2014).** The study of germination and anatomy of vegetative organs in *Trifolium pretense* L.*Developmental biology journal* 6 (4): 11-21.
- 20- **Jafari, Ak. , M., Ebrahimzadeh, Iranbakhsh, A. (2014).**Effect of different concentration of Benzyl Adenine and Kinetin on regeneration and multiplication of *Gerbera jamesoni*. *Iranian Journal of Biological Sciences Danish-Zisti Iran*, 8 (2), 61-70
- 21- **Shaki, Sh., Iranbakhsh, A., & Niakan, M. (2013).** Salicylate Effect on Some of Physiological Response of *Hibicus esculntus* in Drought Stress. *Iranian Journal of Plant Biotechnology*, 8(1), Spring, 1-7.
- 22- **Abdi, E.,Iranbakhsh, A., &Motalebi, E. (2013).** Bio-fertilizersandtheinteractionof different substrates onvegetativegrowththyssoy plant (*Hyssopus officinalic* L.). *Iranian Journal of Plant Biotechnology*,7(3), Autumn, 53-63.
- 23- **Jafaripoor, M., Iranbakhsh, A., & Majd, A. (2013).**Effect ofzinc chlorideandlead chlorideon germinationandseedling growthof rape (*Brassics napus* L.).*Journal of plant & Ecosystem*,9(34),Spring, 107-115.

- 24- **Mahmoudi N., Iranbakhsh, A., & Motalebi, E. (2013).** The study of symbiosis effects of some of the species mycorrhizal arbuscular fungus on the vegetative functions *Salvia* plants. *Iranian Journal of Plant Biotechnology*, 7(2), Summer, 59-67.
- 25- **Hamdi S, M. M., & Iranbakhsh, A. (2013).** The Micromorphology studies on Seed and Fruit of *Asparagusspecies* (Asparagaceae) in IRAN. *Journal of Plant Science Researches*, Islamic Azad University, Gorgan Branch, 8(1), Winter, 45-50.
- 26- **Moinian, S., Iranbakhsh, A., & Bahdori, F. (2013).** Comparison of six rose genotypes in semnan. *Biology Journal of Islamic Azad University*, Garmsar Branch, 2(4), Winter, 1-24.
- 27- **Jafari A., Ebrahimzadeh M., & Iranbakhsh, A. (2013).** The study of the different concentrations BAP and Kinetin on regeneration and micropropagation *Gerbera jamesonii*. *Iranian Biology Science*. Islamic Azad University, Varamin Branch, 2(2), 14-22.
- 28- **Hamdi, S, M. M., Assadi, M., Iranbakhsh, A., Malekloo, M., & Ebadi, M. (2012).** Anatomical studies on leaf on Typhaceae in IRAN. *Taxonomy and Biosystematics* 4(2)13-22.
- 29- **Mazandarani, M., Chelchelaei, Sh., Iranbakhsh, A. & Bayat, H. (2012).** Secondary metabolites analysis in plant parts of *Cichorium intybus* L. in chaharbagh mountain, northiran. *Iranian Plant & Biotechnology Journal*, 6(3), 17-25.
- 30- **Iranbakhsh, A., Majd, A. & Jafaripoor, M. (2011).** Effects of Different Concentrations of Lead and Zinc on Biochemical and Physiological Properties, *Journal of Biological Sciences*, Islamic Azad University, Zanjan Branch, 4(13), 27-35.
- 31- **Iranbakhsh, A., Ghorbanli M., & Tandeh, N. (2011).** Anatomical studies some of *Salsola* and *Atriplex* species in the Garmsar Region, *Biology Journal of Islamic Azad University*, Garmsar Branch, 5(3), 34-41.
- 32- **Naghavi, F., Iranbakhsh, A. & Majd, A. (2011).** Effects of Zinc and Lead on seedling growth of Soybean (*Glycine max*L.), *Journal of plant & Ecosystem*, Islamic Azad University, Shahr Rey Branch, 7(28), 81-97.
- 33- **Iranbakhsh, A., Ghorbanli, M. & Tandeh, N. (2011).** Micromorphological studies of the genera *Atriplex* and *Salsola* (*Chenopodiaceae*) in Garmsar area, *Journal of Developmental Biology*, Islamic Azad University, North Tehran Branch, 5(3), 23-31.
- 34- **Iranbakhsh, A., Majd A., & Naghavi, F. (2011).** The Study of the effect of Lead and Zinc on seed germination and seedling growth of Soybean (*Glycine max* L.), *Journal of Plant Science Researches*, Islamic Azad University, Gorgan Branch, 5(4), 63-73.

- 35- Iranbakhsh, A., Ebadi, M.,& Hamdi, S. M. M. (2010). The semi-industrial proliferation of *Saintpaulia inonata* by micropropagation method, *Journal of Developmental Biology*, Islamic Azad University, North Tehran Branch, 1(4), 1-15.
- 36- Iranbakhsh, A., Ebadi, M.,& Majd, A. (2008). The Study on Effect of Some Growth Regulation on Vegetative Function and Production in Parthenocarpic Cucumber (*Cucumis sativa* L.) in Greenhouse, *Journal of Sciences*, 66(11), 109-128.
- 37- Ebadi, M., Iranbakhsh, A.,& Bakhshi Khaniki, G. (2008). In vitro Microtuber Enlargement of Potatoe (*Solanum tuberosum* L.) and Parenchyma Cells Heterogeneous Growth, *Journal of Pajouhesh and Sazandegi*, 78, Spring, 11-18.
- 38- Iranbakhsh, A., Hamdi, S. M.,& Asadi, M. (2008). Introducing the Flora of Garmsar Region in Semnan Province, *Journal of Pajouhesh and Sazandegi*, 78, Spring, 179-199.
- 39- Ebadi, M., Lari Yazdi, H., Koosha, A.,& Iranbakhsh, A. (2007). The Study of the Different Effects of NaCl Salinity on the Trend of Ontogenic of Microtuberization of Potato, (*Solanum tuberosum* L.) Sante Cultivar, *Biology Journal of Islamic Azad University*, Garmsar Branch, 2(4), Winter, 1-24.
- 40- Iranbakhsh, A., Ebadi, M.,& Oraghi Ardebili, Z. (2007). A study on the Response of *Datura stramonium* Seedling in Relation to Some Hormonic Treatment so as to gain access to the best Callus Formation Medium, *Biology Journal of Islamic Azad University*, Garmsar Branch, 2(5), 1-6.
- 41- Pourhabibiyan, R., Tavassoli, A., Pakravan, M., Ebadi, M.,& Iranbakhsh, A. (2007). The Cariological Study of some species of *Consolida* (DC) S.F. Gray (*Ranunculaceae*) in Iran, *Biology Journal of Islamic Azad University*, Garmsar Branch, 2(2), Summer, 1-8.
- 42- Nosrati, A., Iranbakhsh, A.,& Sabouri, M. S. (2007). A Survey on Disoersion and Disintegration of Herbicides 2,4D and Atracin in Field Conditions, *Journal of Pajouhesh and Sazandegi*, 75, Winter, 86-96.
- 43- Iranbakhsh, A., Ebadi, M.,& Zare, Z. (2006). Effect of Different Concentration of Macroelement on in vitro Potato Microtuberization, *Biology Journal of Islamic Azad University*, Garmsar Branch, 1(2), 47-60.
- 44- Hamdi, S. M. M., Iranbakhsh A., Fallahian, F.,& Dehshiri, M. M., (2006). The Study Biosystematic of Pollen Sect. *Speciosa* of Genus *Linaria* (*Scrophulariaceae*) in Iran, *Biology Journal of Islamic Azad University*, Garmsar Branch, 1(1), 6-11.

- 45- **Sabouri, M. S., Hoseini F., Chizari, A. H., & Iranbakhsh A. (2006).** Analysis of Farmers and Expert's Point of View on the Role of Extension in Persian Melon Marketing in Garmsar. *Journal of New Agricultural Sciences*, 2(3). 64-76.
- 46- **Iranbakhsh, A. (2004).** Growth and Production Optimization of Tropane Alkaloids in *Datura stramonium* cell Suspension Culture, *Journal of Pajouhesh and Sazandegi*, 62, Winter, 25-34.
- 47- **Iranbakhsh, A., & Majd, A. (2001).** Study of Structure and Ultrastructure of Tropan Alkaloids Biosynthetic Cells in *Datura stramonium* L., *Journal of Pajouhesh and Sazandegi*, 53, Winter, 16-22.
- 48- **Iranbakhsh, A., & Riazi, G. (2001).** Mechanisms, Time, and Location of Biosynthesis of Tropane Alkaloids in Plants of *Solanaceae*, *Journal of Pajouhesh and Sazandegi*, 53, Autumn, 82-89.
- 49- **Iranbakhsh, A., Majd A., Riazi G., & Mohammadi, E. (2000).** Structural Study of Atropine Biosynthetic Cells in *Atropa belladonna*, *Journal of Pajouhesh and Sazandegi*, 48, Autumn, 90-94.

Published Articles in Arabic

- 1- **Ghorbani, J., Mahouzi A., & Iranbakhsh, A. (2015).** Verifying and Interpretation of Sohrab Sepehri's 8 book from mathematical point of view (in press).

c) Books

1. Iranbakhsh, A., Hesami, S., S. Mehrabanifar (2018) *Origin and evolution of the cell*. Islamic Azad University Publication.
2. Iranbakhsh, A., Hesami, S. (2016) *Molecular mechanisms in plant adaptation*, Islamic Azad University Publication.
3. Iranbakhsh, A., Shafaati, M., (2016) *Molecular biology of Mycoplasma and tissue culture*. Iranian association of plant cell and tissue culture publication.
4. Iranbakhsh, A., Ebadi, M Oraghi Ardebili, Z., (2016) *Plant Anatomy and Morphology; third volume: reproductive organs*. Islamic Azad University Publication.
5. Iranbakhsh, A., Ebadi M (2016) *Plant Anatomy and Morphology; second volume: vegetative organs*. Islamic Azad University Publication.
6. Iranbakhsh, A., Oraghi Ardebili, Z., (2015), *Principles, Concepts and Methods in Plant Biology*. Islamic Azad University Publication.

7. Iranbakhsh, A., Hasani, Gh., & Norouzian, M. (2013). *Bio Math Art*. Islamic Azad University Publication.
8. Iranbakhsh, A., Ebadi, M., & Hamdi, S, M, M. (2013). *Cellular and Molecular Biology. Cytoskeleton*. Islamic Azad University Publication.
9. Iranbakhsh, A., & Ebadi, M. (2012). *Principles of Plant Cell and Tissue Culture* (3rded.). Islamic Azad University Publication.
10. Iranbakhsh, A., & Nouraei, F. (2010). *An Applied Science Production*. Islamic Azad University Publication.
11. Iranbakhsh, A., Seyyed Rezaie, H., Mazandarani, O., & Barani, G. (2009). *English for the Students of Biology*. Rahnama Publication.
12. Iranbakhsh, A., & Asgharpour, H. (2008). *Principles of Biochemistry: For Students of Body Training and Sport Sciences*, (2nded.). Islamic Azad University Publication.
13. Amirjani, M.R., Iranbakhsh, A., & Abnoui, M. (2008). *Molecular Mechanism of Photosynthesis*. Arak University Publication.
14. Iranbakhsh, A., & Soheili, S. (2007). *The Mirror of Policy and Effort: A Search in Islamic Azad University*. Islamic Azad University Publication.
15. Ebadi, M., Iranbakhsh, A., & Bidkhori, M. (2006). *Cellular and Molecular Biology, Nucleous, Cell Cycle & Cancer*. Islamic Azad University Publication.
16. Iranbakhsh, A., Majd, A., & Ebadi, M. (2005). *Plant Anatomy Atlas (Cell & Tissues)*. Islamic Azad University Publication.
17. Iranbakhsh, A., & Mirzaei, A. (2000). *Effect of Environmental Factors on optimized applications of Pesticides*. Islamic Azad University Publication.

d) Paper Presentations in International Congresses

1. **Terachem 2018** - The third International Symposium on Technetium and other Radiometals in Chemistry and Medicine, 27th June, Ganztägig, synthesis and evaluation of [2 + 1] Re(I)/Tc(I) complexes as isostructural optical and nuclear probes for imaging prostate cancer
2. 20th National & 8th International Congress of Biology, 22-24 Aug, **2018**, University of **Maragheh, Iran**. The survey of female gametophyte development and effect of Sodium Chloride stress on ontogeny of flower's components in *Pistacia vera* L

3. The international conference ICB **Tehran, Iran, 2017**, Entitled a study on the creation and growth of hairy root in luffa cylindrical produced by the insemination of various *Agrobacterium rhizogenes* species by tissue culture
4. The international conference on Plant Research in a Changing World, **Kiel, Germany, 2017** from September 17 to 21, **Germany 2017** Entitled RNA-seq transcriptome profiling of wheat roots reveals improving effect of arbuscular mycorrhizal *Glomus mosseae* under drought stress
5. The international conference on Plant Research in a Changing World, **Kiel, Germany, 2017** from September 17 to 21, Entitled: Arbuscular mycorrhizal fungus "Glomus mosseae" enhances cell wall biosynthesis and growth and decreases cell wall organization in *Triticum aestivum* roots
6. The international conference on Plant Research in a Changing World, **Kiel, Germany, 2017** from September 17 to 21, Entitled: Accelerating effect of arbuscular mycorrhizal symbiosis on expression of the genes involved in transmembrane transport in bread wheat roots.
7. The international conference on Plant Research in a Changing World, **Kiel, Germany, 2017** from September 17 to 21, Entitled: synergistic effect of drought stress and arbuscular mycorrhizal symbiosis on up-regulation of the genes involved in defence response.
8. The 3rd International Symposium on Quality Management in Supply Chains of Ornamentals, **Kermanshah, Iran**, Entitled: The anatomical studies of *Populus euphratica*, *Populus alba* and their hybrids in Karaj and Garmsar regions of Iran. P. 24
9. The 17th National & 5th International Iranian Biology Conference, 2 Sept. **2012, Kerman, Iran**, Entitled: study of effect of different levels of MnSO₄ and CaCl₂ on cellular changes of Potato Microtuberization (*Solanum tuberosum* L. var. Agria) in *in vitro* condition.
10. The 17th National & 5th International Iranian Biology Conference, 2 Sept. **2012, Kerman, Iran**, Entitled: Comparison of anti-mutation and anti-cancer activities of vegetative and reproductive organs of *Lippia citroidora* using Salmonella
11. International Congress on Applied Biology, **2011, Mashhad, Iran**, Entitled: 'The Study of the effects of Lead and Zinc on seed germination and seedling growth of Soybean (*Glycine max* L.).

12. International Congress on Applied Biology, **2011, Mashhad, Iran**, Entitled: '*Study of antioxidant enzymes activity changes in avena seeding in presence of salt and quercitin*'.
13. World Conference on Information Technology, October 06-10, **2010, Istanbul, Turkey**, Entitled: '*The Impact of Information technology in Biological Sciences*'.
14. The 4th International Conference of Biology, Ferdowsi University, September 14-16, **2010, Mashhad, Iran**, Entitled: '*Optimizing Soybean Tissue Culture for DREB1A Gene Transformation*'.
15. The 4th International conference of Biology, **September 2010, Mashhad, Iran** Entitled: '*Comparative study of Anatomical structure-ontogeny and antimicrobial activity of Two species of Lippia (Lippia citriodora , Lippia nodiflora) from verbenacea*'.
16. The 4th International Conference of Biology, Ferdowsi University, September 14-16, **2010, Mashhad, Iran**, Entitled: '*Comparative study of Anatomical structure-ontogeny and antimicrobial activity of Two species of Lippia (Lippia citriodora , Lippia nodiflora) from verbenacea*'.
17. International Conference on Agricultural and Biological Engineering, September 23-25, **2009, Amsterdam, Netherlands**, Entitled: '*The Effects of N, K in Histological Cellular Variation of Microtuberization Invitro Tissue Culture Potato (Solanum tuberosum L.) var Agria*'.
18. International Conference on Agricultural, Food and Nutritional Sciences, September 23-25, **2009, Amsterdam, Netherlands**, Entitled: '*Effect of Different Concentration of Macroelements on Invitro Potato Microtuberization*'.
19. The 2nd World Scientific Congress, Challenges in Botanical Research (BGCI), 29 June-04 July, **2008, Delft, Netherlands**, Entitled: '*The Study on Effects of Some Growth Regulators on Vegetative Function and Production in Parthenocarpic Cucumber (Cucumis sativa L.) in Greenhouse*'.
20. The 5th International Conference on Propagation of Ornamental Plants, 5-8 September **2007, Sofia, Bulgaria**, Entitled: '*The inhibitory effects of plant methanolic extract of Datura stramonium L. and leaf explants due to call against bacteria and fungi*'.

- 21.5th International Conference on Propagation of Ornamental Plants, 5-8 September **2007, Sofia, Bulgaria**, Entitled: '*In vitro Microtuber Expansion of Potato (Solanum tuberosum L.) and Parenchyma Cells Heterogenous Growth*'.
22. The 11th International Congress of Plant Tissue Culture & Biotechnology, 13-18 August, **2006, Beijing, China**, Entitled: '*The Investigation of the Ontogenetic Cellular Trend of Microtuber formation in Potato*'.
23. The 11th International Congress of Plant Tissue Culture & Biotechnology, 13-18 August, **2006, Beijing, China**, Entitled: '*The Shoots Formation and Microtuberization of Potato in Continuous and Semi-continuous Bioreactors*'.
24. The 2nd International Conference of Biology, 29-31 August, **2006, Tehran, Iran**, Entitled: '*Introducing the Flora of Garmsar Region in Semnan Province*'.
25. The First International Biology Conference, 23-25 August, **2005, Rasht, Iran**, Entitled: '*Study on Some Regulators on Growth and Production of Parthenocarpic Cucumis sativus*'.
26. The First International Biology Conference, 23-25 August, **2005, Rasht, Iran**, Entitled: '*The some effects of the chemical and physical treatments on in vitro potato (Solanum tuberosum L.) microtuberization*'.
27. The XVII International Botanical Congress, 17-23 July, **2005, Vienna, Austria**, Entitled: '*Growth and production optimization of tropane alkaloids in Datura stramonium cell suspension culture*'.
28. The 2nd Congress on Applied Biology (International Approach), 29-30 September, **2004, Mashhad, Iran**, Entitled: '*Studies on the Inhibition Effects of Plant Extract of Datura stramonium L. and Leaf Explant due Calli on Bacteria and Fungi*'.
29. XXII International Conference on Polyphenols, 25-28 August, **2004, Helsinki, Finland**, Entitled: '*Repellent effect of extraction and essential oil of Citrus Limon and Melissa Officinalis against Main Malaria Vector, Anopheles Stephensi in IRAN*'.
30. International Congress of Entomology, 15-21 August, **2004, Queensland, Australia**, Entitled: '*Molecular Characterization of Different Biological Forms of Anopheles Stephensi in Iran*'.
31. The First International Congress of Wheat, **2002, Tehran, Iran**, Entitled: '*A Survey on the Balanced Plant Feeding on the Efficiency Increase in Wheat Varieties of Garmsar Region*'.

32. The 2nd International Conference of Iran and Russia, 1-2 February **2001, Moscow, Russia**, Entitled: 'A Study of Period, Location and Mechanisms of Tropane Alkaloid Biosynthesis in vivo and in vitro on *Datura stramonium L.*'
33. International Congress and 49th Annual Meeting of the Society for Medicinal Plant Research, 2-6 September, **2001, Erlangen, Germany**, Entitled: 'Study structure and Ultrastructure of Tropane Alkaloid Biosynthesizing Cells (Idioblasts) in *Datura stramonium L. (Solanaceae)*'.

e) Paper Presentations in National Conferences

1. The 7th National conference on bioinformatics, **TM University, Iran**, 2018. In silico evolution and prediction of intra\inter space relationship and properties of antigen region 4 of HA swine influenza H1N1 virus.
2. The 1st National conference on ecology, variation and protection of species, **Shahid Beheshti University**, 2017. The Effect of Priming with Artificial growth regulator of mepiquat chloride in Selection of salt- resistant idipotypes in Newly-Cotton Cultivars in the seedling stage with the aim of Preserving of Species and Protecting Soils in Salty and Semi-Salty Areas of Iran
3. The 1st National conference on plant tissue culture, Islamic Azad University, **Isfahan branch, Iran**, 2016. The effect of laser and salt on some growth parameters of meristem of potato in *in vitro* condition
4. The 1st National conference on plant tissue culture, Islamic Azad University, **Isfahan branch, Iran**, 2016. Effects of Culture Media on some vegetative indicators of purple coneflower in *in vitro* condition.
5. The 1st National conference on plant tissue culture, Islamic Azad University, **Isfahan branch, Iran**, 2016. Produced Trigonelline in hypocotyl callus of Fenugreek
6. The 2nd National conference on new cellular and molecular sciences, Islamic Azad University, **Parand branch, Iran**, 2015. Tannin extraction from the leaves of two oak species in North and Western of Iran.
7. The 2nd National conference on new cellular and molecular sciences, **Parand, Iran**, 2015. The survey of diversity in *Q. castaneifolia* and *Q. infectoria* leaves morphological, organogenesis and protein content characters in various geographical conditions in Iran.

8. National conference of passive defense in agriculture. **Qeshm Island, Iran.** 2013. The effect of a combination of mechanical and chemical weed control methods on corn yield and yield components.
9. National conference of passive defense in agriculture. **Qeshm Island, Iran.** 2013. The effect of a combination of mechanical and chemical weed control methods on frequency and biomass of corn weed.
10. The 2nd National Congress on Medicinal Plants. **Tehran, IRAN.** 2013. Assessment of some biochemical parameter in two Rosa damascene mill genotypes in cold weather conditions (Case Study in Semnancity).
11. First National Conference on strategies for achieving sustainable development in agriculture, natural resources and environment. **Tehran, IRAN.** 2012. Evaluation of some morphological traits (quantitative and qualitative) in three genotypes of rose due to climate Semnancity.
12. First National Conference on strategies for achieving sustainable development in agriculture, natural resources and environment. **Tehran, IRAN.** 2012. Evaluation of some physiological traits and yield of four genotypes in cold and hot weather conditions (Case Study in Semnancity).
13. National Conference on Strategies Towards Sustaining Development in Agriculture, Natural Resources, and Environment Sectors, **Tehran, IRAN,** 2012. entitled: Evaluating the physiological attributes in four genotypes of rose in cold and dry climate (A case study of Semnan city).
14. National Conference on Desert-Wetland, **Islamic Azad University, Arak Branch,** 2012, Iran, Entitled: 'The Function comparison of Rose ecotypes in cold and arid weather'.
15. National Conference on Pharmacological plants, **University of Sari,** 2011, Iran, Entitled: 'The study of antimutagen and anticancer activity of the Lippia citriodora methanolic extract on mutant *Salmonella typhimurium* (TA100) '.
16. The 1st National Conference of Crisis Management and Passive Defense, **University of Aliabad Katoul,** 2010, Iran, Entitled: 'A Study on the Role of Ecologic Factors in Passive Defense and Settlement of Golestan Province'.
17. The 3rd National Conference of Biology and future, **Islamic Azad University Garmsar Branch,** 2010, Iran, Entitled: 'Semi Industrial Proliferation of African violet by Micropropagation'.

18. The 3rd National Conference of Biology and future, **Islamic Azad University, Garmsar Branch, 2010**, Iran, Entitled: 'Identification of Medicinal plants of Garmsar Central Region'.
19. The 11th Iranian Biology Conference, **University of Urmia, 2003**, Iran, Entitled: 'A Study on the Response of *Datura stramonium* Seedling in Relation to Some Harmonic Treatment so as to Gain Access to the Best Callus Formation Medium'.
20. The Congress of Military Medicine, **University of Baghyatollah, Medical Sciences, 2002**, Iran, Entitled: 'A Survey on The Effects of Methonolic and Water Extracts of Callus Obtained from Leaf Explants and Various *Datura stramonium L.* on the Infection Generation Bacteria in the Hospitals'.
21. The First Iranian Congress on Applied Biology, **Islamic Azad University, Mashhad Branch, 2001**, Iran, Entitled: 'Using the Commercial Macroelements and the Effect of Different Meristem Sections in Industrial Production of *Musa covendishii L.*'.
22. The First Iranian Congress on Applied Biology, **Islamic Azad University, Mashhad Branch, 2001**, Iran, Entitled: 'Reproduction *Miltonia sp.* as an Ornamental Plant through Tissue Culture'.
23. The First Iranian Congress on Applied Biology, **Islamic Azad University, Mashhad Branch, 2001**, Iran, Entitled: 'The Role of Cell and Tissue Culture Techniques in the Semi-industrial Production of Some Effective Herbal Drugs'.
24. The Congress of Garmsar and Stable Development, **Islamic Azad University, Garmsar Branch, 2001**, Iran, Entitled: 'A Study of Barriers and Problems of Agricultural Development in Garmsar Region'.
25. The Congress of Garmsar and Stable Development, **Islamic Azad University, Garmsar Branch, 2001**, Iran, Entitled: 'Industrial Micropropagation of Banana Plants in Garmsar Region'.
26. The Congress of Investigation on the Water Supplies of Iran Central Alborz Mountains, **University of Semnan, 2001**, Iran, Entitled: 'Using Saline Water for Agricultural Lands of Garmsar Region'.
27. The 9th Iranian Biology Conference, **University of Tehran, 2000**, Iran, Entitled: 'Growth and Production Optimization of Tropan Alkaloids in *Datura stramonium* Cell Suspension Culture'.
28. The 6th Iranian Congress of Plant Breeding, **University of Mazanderan, 2000**, Iran, Entitled: 'Cell Suspension Culture of *Datura stramonium L.* (Solanaceae)'.

29. The First Iranian Congress of Biochemistry and Biophysics, **University of Tehran, 2000**, Iran, Entitled: ‘Assay of Structure and Ultra Structure of Tropane Alkaloids Biosynthesis in *Datura stramonium L.*’.
30. The First Iranian Congress of Biochemistry and Biophysics, **University of Tehran, 2000**, Iran, Entitled: ‘Assay of the Time and Location of Tropane Alkaloids Biosynthesis in *Datura stramonium L.*’.
31. The 8th Iranian Biology Conference, **University of Razi, 1999**, Iran, Entitled: ‘Tissue Culture and Cell Suspension, Leaf Explant and Atropine Alkaloid Ability Biosynthetic Observation in *Datura stramonium L.*’.
32. The **Islamic Azad University, Garmsar Branch, 1998**, Iran, Entitled: ‘Biotechnology and its Application in Agriculture’.
33. The 6th Congress of Biology, **University of Bahonar, 1997**, Iran, Entitled: ‘Effect of Environmental Factors on the Synthesizing of Atropine in *Atropa belladonna* Plants’.
34. The 4th Biochemistry Congress of Iran, **University of Babol Medical Sciences, 1997**, Iran, Entitled: ‘Studies on Structure and Ultra-structure of Cells, Synthesizing of Atropine (Idioblasts) in *Atropa belladonna L.* and the Effect of some Environmental Factors on Atropine Production’.

4. TECHNICAL AND PROFESSIONAL SKILLS

- ✓ Plant Cell, Tissue and Organ Culture
- ✓ Plant Cytological Techniques such as Karyotyping
- ✓ General Techniques in Plant Sciences
- ✓ Plant Micro-propagation
- ✓ Electron Microscopy
- ✓ PCR & Gene Cloning
- ✓ Plasma and plant biology
- ✓ Production of Secondary Metabolites by Biochemical Engineering

5. Registered genes in GenBank (NCBI)

1- *Astragalus strictus* strain IRI1397 small subunit ribosomal RNA gene, partial sequence; 660 bp linear DNA; Accession: MK583670.1; GI: 1585097816

2- *Bacillus amyloliquefaciens* strain IRI_1396 16S ribosomal RNA gene, partial sequence. 1,036 bp linear DNA; Accession: MF407521.1; GI: 1213392209

3- *Nanobacterium* sp. Persian TH hmb 16S ribosomal RNA gene, partial sequence; 1,290 bp linear DNA; Accession: KX156617.1; GI: 1041562790

4- *Micrococcus* sp. strain IRI16 16S ribosomal RNA gene, partial sequence; 941 bp linear DNA; Accession: MF805137.1; GI: 1274591583

5- *Nanobacterium* sp. Persian THR hmb 16S ribosomal RNA gene, partial sequence; 1,452 bp linear DNA; Accession: KX156618.1; GI: 1041562802

6. REGISTERED INVENTIONS

1. Mashhadban, S., & Iranbakhsh, A. (2016). Multipurpose wheelchair. (Gold Medal, Seoul international Invention fair).
2. Iranbakhsh, A., Amiri, N., Bakhtiyari, A. 2016 production of Enriched confection with herbal active ingredients.
3. Iranbakhsh, A., Amiri, N., Bakhtiyari, A. 2016 production of the food precursor enriched with herbal and microbial active ingredients with anti-depressant and antistress characteristics based on *Borage officinalis*.
4. Iranbakhsh, A., Amiri, N., Bakhtiyari, A. 2016 herbal-enriched natural cream based on *Rosa damascene*.
5. Iranbakhsh, A. (2015) the production of an effective ointment for treatment of burns by Typha extract.
6. Iranbakhsh, A., Tayar, Y., & Ebrahimi, M. (2015). Enriching the quality of vermicompost manure and increasing the production of *Elsenia Foetida* earthworm through industrial method using electric machines.
7. Khaje, A., Iranbakhsh, A., & Tayar, Y. (2011). The advanced vein pump by smart material system. (Gold Medal, ITEX 2011, Kuala Lumpur, Malaysia).
8. Mashhadban, S., & Iranbakhsh, A. (2011). All-round wheelchair. (Silver Medal, The 2nd Olympiad of Inventors, Originators, and Innovators, Islamic Azad University, Khorasgan Branch, Isfahan, Iran).
9. Khaje, A., & Iranbakhsh, A. (2011). Developed Botanical Vascular Pump with Nano-microstructure. (Bronze Medal, The 2nd Olympiad of Inventors, Originators, and Innovators, Islamic Azad University, Khorasgan Branch, Isfahan, Iran).

10. Iranbakhsh, A., & Tayar, Y. (2011). Vertical Green Area. (Bronze Medal, The 2nd Olympiad of Inventors, Originators, and Innovators, Islamic Azad University, Khorasgan Branch, Isfahan, Iran).

7. PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

- ✓ Supervisor of Dissertations in Postdoctoral Program in Science and Research Branch, Islamic Azad University
- ✓ Member of editorial board in journal of nanostructure in chemistry.
- ✓ Member of editorial board in journal of environmental plant physiology, Gorgan.
- ✓ President of the 2nd national Congress of new Cellular and Molecular biology
- ✓ Chairman of the arbitration committee invention (Biology and Environment) of Islamic Azad University
- ✓ Board member of IMA Karate style of Iran 2015
- ✓ Secretary of the Committee on the development of stem cell technology
- ✓ Member, The Council for Organizational Ranking and Promotion of Islamic Azad University
- ✓ Official expert in National Standard Organization of Iran.
- ✓ Member of the Scientific Committee of the Congress of natural products
- ✓ President of the National Conference on "The role of agriculture in the resistant economy" Roudhen university (2014)
- ✓ Academic Chairman of the National Conference on "Nano- from synthesis to industry" science and research branch, Islamic Azad university (2017)
- ✓ President of the First International Congress of epics of politic and economy, Rudehen university (2014)
- ✓ Head of Biology Major in Measurement and Admittance vice Presidency of Islamic Azad University. Since February 2015
- ✓ Member, Strategic Council for Research and Technology in Islamic Azad University (IAU) since April 2014
- ✓ Member, Specialized Committee of Biology in the Council for Educational and Academic Planning of Islamic Azad University (IAU) Since April 2014
- ✓ Head, Department of Quran and Biology, Scientific Association of Quran and Iran's Scientific Evolution Since 2013

- ✓ Head, Basic Sciences referee Committee, International Festival of Inventors, Initiators, and Innovators, April 2014, Shiraz, Iran.
- ✓ Member, Research Council of Eastern Tehran Police Reinforcement Since 2013
- ✓ Head, the Council for Educational and Academic Planning of Islamic Azad University (IAU), Since 2013.
- ✓ Chairman, Basic Sciences Committee of Iran's Young Researchers Club & Elites. Since 2013.
- ✓ Co-founder and member, The Iranian Plant Cell and Tissue Culture Association (accredited by the Iranian Ministry of Science, Research, and Technology) Since 2012.
- ✓ Founding member and president of the Iranian Plant Cell and Tissue Culture Association (accredited by the Iranian Ministry of Science, Research, and Technology) since 2012.
- ✓ Board member of the Iranian Biology Association, since 2017.
- ✓ Board member of the international Free Fighting Association FK1
- ✓ Director, IAU Tehran Province Recruiting Committee in Sciences, since 2012
- ✓ Member, Specialized Committee for the Department of Chemistry and Biology in the Board of Surveyors, Since 2012.
- ✓ Member, Central Council of IAU Publication Office, Since 2012
- ✓ Member, Specialized Committee in IAU Provincial Development Committee, since 2012
- ✓ Editorial Director, Scientific Journal of Plant Cell and Molecular Biology, published by IAU Garmsar Branch, since 2005.
- ✓ Member, Referee Committee for Selecting Top Researchers in Islamic Azad University, 2012.
- ✓ Member, Referee Committee for the 3th Olympiads of Inventors of Islamic Azad University, 2012.
- ✓ Member, Strategic Council for Olympiads of Inventors, Originator and Innovators, Islamic Azad University, 2010 to 2012.
- ✓ Secretary, Verification and Promotion Committee of Islamic Azad University, Region 10.
- ✓ Head, Research and Technology Committee of Islamic Azad University, Region 10 (Golestan & Semnan Province), 2009 to 2012.

- ✓ Associate Professor and Senior Lecturer, Department of Biology at Islamic Azad University, Aliabad Katoul Branch.
- ✓ Member of Editorial Board, Journal of Horticulture and Forestry.
- ✓ Scientific advisor and member of the editorial board of Pooyesh Rahbordi-Expediency Council
- ✓ Editor-in-chief, The Iranian Plant and Biotechnology Journal at Islamic Azad University, Garmsar Branch.
- ✓ Establishing and Utilizing Seven Different Laboratories including Chemistry, Soil Science, Aggregation, Entomology, Plant Diseases, Herbarium, Surveying and Topography in the University of Garmsar, Department of Plant Sciences.
- ✓ Planning and Establishing a Research Farm and Greenhouse in the University of Garmsar.
- ✓ Conducting four Research Projects as the first author
- ✓ Production of Herbals Drugs Using Cell and Tissue Culture.
- ✓ Planting Soya in Garmsar Region and Study on the Microbial and Chemical Treatments on Increasing of Yield.
- ✓ Effect of Some Growth Regulators on the Vegetative Growth and Production of Cucumber Plant.
- ✓ Flora of Garmsar Region.
- ✓ Supervisor, M.S. and Ph.D. Theses in Tehran Islamic Azad University, Sciences and Research Branch, 2004 to date.
- ✓ Supervisor, 79 B.S. Theses at Islamic Azad University, Garmsar Branch, 1998-2007.
- ✓ Member of Young researchers and elite club in Islamic Azad University.
- ✓ Member of the judgment committee of the 4th international festival of inventors, initiators and innovators, April 2015

8. ADMINISTRATIVE ACTIVITIES

2019-05-15 Head of the Faculty of Basic Sciences, Science and research branch, Islamic Azad University

2015- Present President of the Organizing Committee of service prices in the Laboratory and workshop network of Islamic Azad University

2015- Present President of the Education Committee of Vision and elite Expediency Council

2015- Present Head Professional of department of plasma-biology

- 2015- Present Secretary of the Special Committee on Stem Cell Technology Development
- 2015- Present Staff member of international congress of Hafez of Islamic Azad University
- 2015 - Present Head of selection panel of the third scholars festival in laboratory and workshop filed
- 2015 - Present Policy council director of Development in Laboratory Network
- 2014 – Present Director-General for the Development of Laboratory Networks in Islamic Azad University
- 2014 – Present Head of Islamic Azad University’s technical committee for issuance of technical justification for purchasing laboratorial equipment.
- 2014 – Present Member of Decision making council in 69th and 70th Central Council Session of Islamic Azad University
- 2012 – 2014 Chancellor, Islamic Azad University, Roudehen Branch
- 2009 – 2012 Head, Research and Technology Committee of Islamic Azad University, Region 10
- 2011 – 2012 Member, Strategic Council of the Centre for Advanced Science and Technology (CAST), Golestan and Semnan Provinces
- 2007 – 2012 Chancellor, Islamic Azad University, Aliabad Katoul Branch
- 2005 – 2007 Educational Affairs Vice-chancellor at Islamic Azad University, Garmsar Branch
- 2000-2002 Head of Department of Plant Sciences in the Islamic Azad University, Garmsar Branch
- 2005 Editor-in-chief, Scientific Journal of Biology – Plant and Biotechnology at Islamic Azad University, Garmsar Branch
- 2005 – Present Member of Editorial Board, Scientific Journal of Biology at Islamic Azad University- Garmsar Branch, Gorgan Branch, and Tehran North Branch
- 1998 - 2004 Member, Research Committee of the University of Garmsar
- 2003-2004 Member, Educational Committee at Islamic Azad University, Garmsar Branch

- 2002 Head, Expert Committee of Plant Biotechnology Section in the National Congress of Stable Agriculture and Development, Islamic Azad University, Garmsar Branch, Iran.
- 2002 Head, Meeting of "Challenge of Agricultural Extension" at Islamic Azad University, Garmsar Branch, Iran.
- 2001 Chairman, Academic Committee in the Congress of "Garmsar and Stable Development", Islamic Azad University, Garmsar Branch, Iran.
- 2001 Head, Agricultural and Animal Breeding Scientific Committee of the Congress of "Garmsar and Sustained Development", Islamic Azad University, Garmsar Branch, Iran.

9. HONORS AND AWARDS

- 2014 Selected as the author of the best book in Scholars Award in 1393 for book "bio mat art"
- 2011 Distinguished and featured university Chancellor in Islamic Azad University.
- 2007 Distinguished and featured researcher in Islamic Azad University.
- 2003 Distinguished and Selected Researcher in Semnan Province.
- 2009 Distinguished and featured Lecturer in Islamic Azad University.
- 2009 Distinguished and featured University Chancellor in explaining the 1404 vision.

10. TEACHING EXPERIENCE

- 2014–Present Faculty Member, Islamic Azad University, Science and Research Branch Tehran
- 2012 – 2014 Faculty Member, Islamic Azad University, Roudehen Branch
- 2007 - 2012 Faculty Member, Islamic Azad University, Aliabad Katoul Branch
- 1998 - 2007 Faculty Member, Islamic Azad University, Garmsar Branch
- 1994 -1998 Visiting Professor, Islamic Azad University, Tonekabon Branch

11.ASSOCIATION MEMBERSHIPS

1. Iranian Association of Plant Cell and Tissue Culture
2. Iranian Association of medicinal plants

3. Australian Society of Plant Scientists
4. Iranian Society of Biotechnology
5. Iranian Society of Biology
6. Iranian Society of Probiotic
7. Iranian Society of Environmental
8. Scientific Association of Quran and Iran's Scientific Evolution
9. Iranian Red Crescent Society

12. Codification of National Standards

Codification of six national standards

13. SOCIAL ACTIVITIES

2008	Getting a Karate Black Belt- DAN 4
2014 – Present	Member of the Islamic Azad University's Karate Association
2013 - Present	Member of the Iran's Board of Supersabaki Martial Arts
2008 - Present	Member of the Iran's Board of Shotokan Karate
2007 - 2010	Head of Golestan Province's Board of Swimming, Diving, and Water Polo
2007 – 2012	Vice-president of Iran's Specialists Association and Head of Golestan Province's Specialists Association.