

Associate Professor

Department of Horticulture
and Urban Landscape Research Group
College of Agriculture
Isfahan University of Technology
8415683111 Isfahan, Iran
Tel/Fax: +98- 31-33913412
Email: anikbakht@cc.iut.ac.ir
Web: <http://nikbakht.iut.ac.ir>

Education

- 2010-2011..... Isfahan House of Industry and Mine, Iran. **Advanced diploma in Landscape Architecture**
- 2003-2008..... University of Tehran, Iran. **Doctorate in Physiology of ornamental plants (Ph.D.)**, thesis entitled Effect of humic acid on calcium absorption and nutrients balance role on the physiological and morphological characteristics of cut Gerbera. GPA (18.4/20)
- 2005-2006..... Zhejiang University, China. **Advanced diploma in Plant Nutrition**
- 2001-2003..... University of Tehran, Iran. **Master of Science in Horticulture (M Sc.)**. Thesis entitled Micropropagation of Damask rose (*Rosa damascena* Mill.) cvs Ghamsar and Azaran via auxiliary bud. GPA (18.3/20)
- 1997-2001..... Isfahan University of Technology, Iran. **Bachelor of Science in Horticulture**. GPA (16.4/20)

Academic Employment

- Feb. 2009- Present..... **Associate Professor**, Dept. of Horticulture, Isfahan University of Technology, Isfahan, Iran
- Jan. 2008-Feb. 2017..... **Assistant Professor**, Dept. of Horticulture, Isfahan University of Technology, Isfahan, Iran
- 2005-2006..... **Researcher**, Dept. of Plant Nutrition, Zhejiang University, Hangzhou, China

Visiting Programs

Aug 2013 – Sep 2013.....	Visiting Scholar at Karsten Turfgrass Research Facility, School of Plant Sciences , The University of Arizona, USA
Apr 2008 – Aug 2008.....	Visiting Scholar at Department of Natural Resources , Massey University, New Zealand.
May2007- Nov.2007.....	Visiting Scholar at Department of Agronomy , University of Cordoba, Spain

Awards and Fellowships

2007.....	Iranian Ministry of Science, Research and Technology fellowship. University of Cordoba, Spain
2005-2006.....	Great Wall Fellowship. UNESCO- China co-sponsored fellowship. Dept. of Plant Nutrition, Zhejiang University, Hangzhou, China

Publication list

Accepted for Publication

1. Amiri, A., **A. Nikbakht** and N. Etemadi. M.R. Sabzalian. 2017. Nutritional status, essential oil changes and water-use efficiency of rose geranium in response to arbuscular mycorrhizal fungi and water deficiency stress. *Symbiosis*.
2. Amiri, A., **A. Nikbakht**, M. RahimMalek, H. Hosseini. 2017. Variation in the essential oil composition, antioxidant capacity, and physiological characteristics of *Pelargonium graveolens* L. inoculated with two species of mycorrhizal fungi under water deficit conditions. 2017. *Journal of Plant Growth Regulation*.
3. Ashrafi, N., **A. Nikbakht**, M. Gheysari. 2016. Effect of recycled water applied by surface and subsurface irrigation on the growth, photosynthetic indices and nutrient content of young olive trees in central Iran. *Journal of Water Reuse and Desalination*.

Published

Peer Reviewed International Journals

1. Sheikh Mohammadi, M.H., N. Etemadi and **A. Nikbakht**. 2017. Physiological responses of two cool-season grass species to trinexapac-ethyl under traffic stress. *HortScience*. 52: 99-109
2. Khorsandy, S., **A. Nikbakht**, M.R. Sabzalian and M. Pessarakli. 2016. Fungal endophyte presence affects morphological characteristics, nutrients content and longevity of plane tress (*Platanus orientalis* L). *Journal of Plant Nutrition*. 39: 1156-1166.
3. Haghighi, M., **A. Nikbakht** and M. Pessarakli. 2016. Effects of humic acid on remediation of the nutritional deficiency of gerbera in hydroponic culture. *Journal of Plant Nutrition*. 39: 702-713.

4. Amiri, A. **A. Nikbakht** and N. Etemadi. 2015. Alleviation of drought stress on rose geranium [*Pelargonium graveolens* (L.) Herit.] in terms of antioxidant activity and secondary metabolites by mycorrhizal inoculation. *Scientia Horticulturae* 197: 373–380.
5. Ashrafi, A., **A. Nikbakht**, M. Gheysari, R. Fernandez-Escobar and M.H. Ehtemam. 2015. Effect of a new irrigation system using recycled water on stomatal behavior, photosynthesis and nutrient uptake in olive trees (*Olea europaea* L.). *Journal of Horticultural Science and Biotechnology*. 90: 401-406
6. Amiri-Khah, R., N. Etemadi, **A. Nikbakht** and M. Pessaraki. 2015. Influence of sequential trinexapac-ethyl applications and traffic on growth and chemical constituents of perennial ryegrass (*Lolium perenne* L.). *Korean Journal of Horticultural Science and Technology*. 33: 340-348
7. Etemadi, N. M.H. Sheikh Mohammadi, **A. Nikbakht**, M.R. Sabzalian and M. Pessaraki. 2015. Influence of trinexapac-ethyl in improving drought resistance of wheatgrass and tall fescue. *Acta Physiologiae Plantarum*. 37: 53-70.
8. Daneshvar, N., M. Kafi, **A. Nikbakht** and F. Rejali. 2015. Effect of foliar applications of humic acid on nutrient content, growth, root parameters and visual quality of perennial ryegrass (*Lolium perenne* L.). *Journal of Plant Nutrition*. 38:224–236.
9. Saeedi, R. N. Etemadi, **A. Nikbakht** and A.H. Khoshgoftarmanesh. 2015. Calcium Chelated with Amino Acids Improves Quality and Postharvest Life of Lisianthus (*Eustoma grandiflorum* cv. Cinderella Lime). *HortScience* 50(9):1394–1398.
10. Yazdani, B., **A. Nikbakht** and N. Etemadi. 2014. Physiological effects of different combinations of humic and fulvic acid on gerbera. *Communications in Soil Science and Plant Analysis*. 45:1357-1368.
11. Haghighi, M., **A. Nikbakht**, Y.P. Xia and M. Pessaraki. 2014. Effects of humic acid addition to nutrient solution on growth, nutrient efficiency and postharvest attributes of gerbera. *Communications in Soil Science and Plant Analysis*. 45: 177-188.
12. **Nikbakht, A.**, M. Pessaraki, N. Daneshvar and M. Kafi. 2014. Mycorrhizal infection, nutrients uptake, and quality of ryegrass under humic acid treatments. *Agronomy Journal*. 106: 585-595.
13. Amani Beni, M., A. Hatamzadeh, **A. Nikbakht**, M. Ghasemnezhad, M.Zarchini.2013. Improving Physiological Quality of Cut Tuberose (*Polianthes tuberosa* cv. Single) Flowers by Continues Treatment with Humic Acid and Nano-Silver Particles. *Journal of Ornamental Plants (Journal of Ornamental and Horticultural Plants)*, 3 (3): 133-141.
14. **Nikbakht, A.**, N. Etemadi, B. Yazdani and M. Majidi. 2012. Application of humic and fulvic acids in nutrient solution affect postharvest characteristics of *Gerbera jamesonii* L. *Acta Horticulturae*. 934: 495-500
15. Chang, L., Y. Wu, W.W. Xu, **A. Nikbakht** and Y.P. Xia. 2012. Effects of calcium and humic acid treatment on the growth and nutrient uptake of Oriental lily. *African Journal of Biotechnology*. 11(9): 2218-2222.
16. **Nikbakht, A.**, S.A.H. Goli, M. Kargar and S. Ahmadzadeh. 2011. Effect of humic acids on yield and oil characteristics of *Silybum marianum* and *Cucurbita pepo* convar. *pepo* var. *styriaca* seeds. *Herba Polonica*. 57 (4): 25-32
17. Etemadi, N., M. Haghighi, **A. Nikbakht** and Z. Zamani. 2010. Methods to promote germination of *Kelussia odoratissima* Mozaff., an Iranian endemic medicinal plant. *Herba Polonica*. 56(2): 23-28
18. **Nikbakht, A.**, M. Kafi, M. Babalar and Y.P. Xia. 2008. Effect of Humic Acid on Plant Growth, Nutrients Uptake and Postharvest Life of Gerbera. *Journal of Plant Nutrition*. 31: 2155–2167

19. **Nikbakht, A.**, M. Kafi and M. Haghghi. 2008. The abilities and potentials of medicinal plants production and herbal medicine in Iran. *Acta Horticulturae*. 790: 259-262
20. **Nikbakht, A.** and M. Kafi. 2008. A study on the relationship between Iranian people and Damask rose (*Rosa damascena* Mill.) and its therapeutic and healing properties. *Acta Horticulturae*. 790: 251-254
21. Haghghi, M., A. Tehranifar, **A. Nikbakht** and M. Kafi. 2008. Research and current profile of Iranian production of Damask rose (*Rosa damascena* Mill.). *Acta Horticulturae*. 769: 449-455
22. **Nikbakht, A.**, M. Kafi, M. Mirmasoumi and M. Babalar. 2005. Micropropagation of Damask rose cvs Ghamsar and Azaran. *International Journal of Agriculture and Biology*. 7 (4) :535-538

Peer Reviewed Domestic Journals (In Persian with English Abstract)

1. Gheisari, M., N. Ashrafi, A. Maleki and **A. Nikbakht**. 2015. Effect of Irrigation with reclaimed water on fruit characteristics and photosynthesis of olive trees under two irrigation systems. *Journal of Water and Soil*. 29: 569-577
2. Haghghi, M and **A. Nikbakht**. 2015. The concentration changes of divalentelements in roots, stems and leaves of gerbera affected different amounts of calcium and humic acid. *Journal of Soil Research (Soil and Water Sciences)*. 28(2): 387- 396
3. Rezaee, S., **A. Nikbakht**, N. Etemadi, M. Yusefi and M.M. Majedi. 2015. The effect of PE coating and shade on morphological and physiological characteristics of dwarf (cv. Matador) flowers. *Journal of Science and Technology of Greenhouse Culture*22: 135-143
4. Amani Beni, M., A. Hatamzadeh, **A. Nikbakht**, M. Ghasemnezhad, M. Zarchini. 2014. Effect of humic acid and silver nanoparticles to increase the vase life of tuberose (*Polianthes tuberosa* cv. Single) Flowers. *Iranian Journal of Horticultural Science*. 28 (2):185-191
5. Amri-Khah, R. N. Etemadi, Frahmand, Sh and **A. Nikbakht**. 2014. Effect of Trinexapac-Ethyl on quality and Physiological characteristics of Perennial Ryegrass (*Lolium perenne* L.) in Salinity conditions. *Iranian Journal of Horticultural Science*. 45:23-33
6. Kiani, E., N. Etemadi, **A. Nikbakht**, J. Razmjoo and R. Amiri Khah. 2014. Evaluation of salinity tolerance of kentucky bluegrass cultivars used in landscape. *Iranian Journal of Horticultural Science and Technology* 15 (1): 119-130
7. Khorsandi, S., **A. Nikbakht**, M.R. Sabzalian and B. Sharifnabi. 2014. Effect of Age and Tree Tissue on Endophytic Fungi Presence, Nutrient Content and Morphological Characteristics of Plane Trees. *Iranian Journal of Horticultural Science and Technology* 15 (3): 317-330
8. **Nikbakht, A.**, N. Ashrafi, M. Gheisari, N. Etemadi and A. Maleki. 2013. Effects of subsurface-leaky irrigation system and wastewater on growth and physiological characteristics of ‘roghani’ olive trees in urban landscape. *Iranian Journal of Horticultural Science and Technology* 13 (4): 459-468.
9. Daneshvar, N., M. Kafi, **A. Nikbakht**, F. Rejali. 2013. Influence of humic acid and mycorrhiza fungi on some growth characters and nutrient uptake in “Speedygreen” perennial ryegrass (*Lolium perenne* L.) under controlled conditions. *Journal of Horticultural Science and Technology*. 14 (2): 195-210

10. Sheikh Mohammadi, M.H., N. Etemadi and **A. Nikbakht**. 2013. The effect of Trinexapac-ethyl and traffic stress on physiological and morphological characteristics of *Agropyron desertorum*. Journal of Crop Production and Processing.
11. Sheikh Mohammadi, M.H., N. Etemadi and **A. Nikbakht**. 2013. The effect of Trinexapac-ethyl on physiological and morphological characteristics of tall fescue “Rebel” under drought condition. Journal of Crop Production and Processing.
12. **Nikbakht, A.**, M. Gheysari. N. Etemadi, N. Ashrafi and A. Maleki. 2013. Investigation the application of a modern irrigation system and wastewater on physiological characteristics of olive trees in urban landscape (*Olea europaea* L. cv. Roghani). Journal of Horticultural Science and Technology. 13 (4): 459-468
13. Mirabbasi N., **A. Nikbakht** N. Etemadi and M. Sabzalian. 2013. The Effect of different concentrations of potassium silicate, nano-silicon and calcium chloride on concentration of potassium, calcium and magnesium, chlorophyll content and number of florets of Asiatic lily cv. ‘Brunello’. Journal of Science and Technology of Greenhouse Culture. 4 (14):41-50
14. Mirabbasi N., **A. Nikbakht** N. Etemadi and M. Sabzalian. 2013. The Effect of Concentration, Type and Source of Silicon and Calcium Chloride on Characteristics and Postharvest Longevity in Asiatic Lily cv. ‘Brunello’. Iranian Journal of Horticultural Science and Technology 15 (2): 245-256
15. Barkatein, L., **A. Nikbakht** and N. Etemadi. 2013. Effect of source and method of silica application on some of the quantitative and physiological characteristics of *Gerbera jamesonii* L. Journal of Science and Technology of Greenhouse Culture. 13: 39-46.
16. Rahnamoonfar, M., N. Etemadi, **A. Nikbakht**, M. Gheysari and M. Sabzalian. 2013. The effect of shade, Organic materials and Planting time on morphological and physiological characteristics of Lisianthus flowers cv. Matador. Journal Plant Production. 37(3):1-13.
17. Kafi, M. N. Daneshvar, **A. Nikbakht**, F. Rejali and M. Daneshkhah. 2013. Effect of humic acid and mycorrhiza fungi on some characteristics of “Speedy green” perennial ryegrass (*Lolium perenne* L.). Journal of Science and Technology of Greenhouse Culture. 13: 49- 58
18. Kafi, M., M. Babalar, **A. Nikbakht**, H. Ebrahim-Zadeh, N. Etemadi and S. Samavat. 2009. Effect of humic acid spray on nutrients uptake, protein content and postharvest life of *Gerbera jamesonii* cv. Malibu. Iranian Journal of Horticultural Sciences. 40 (1): 69-75
19. Daneshvar, N., M. Kafi, **A. Nikbakht** and F. Rejali. 2012. Effect humic acid on some of quantitative and qualitative characteristics Speedygreen grass. Iranian Journal of Horticultural Science. 42: 403-412
20. **Nikbakht, A.**, M. Kafi, M. Babalar, H., EbrahimZade, N. Etemadi and Y.P. Xia. 2008. Effect of humic acid on calcium absorbtion and postharvest physiological behavior of gerbera. Iranian Journal of Horticultural Science and Technology. 8 (4): 237-248
21. Daneshkhah, M. M. Kafi and **A. Nikbakht**. 2007. The effect of different levels of nitrogen and potassium on qualitative and quantitative characteristics of Damask rose (*Rosa damascena* Mill.). Iranian Journal of Horticultural Science and Technology. 8 (2): 83-90
22. **Nikbakht, A.** 2005. Medicine in landscape architecture: healing gardens. Bagh-i-Nazar. The professional scientific journal of Nazar institute: The art, architecture & urbanism research center. 1(2): 79-82
23. Kafi, M., **A. Nikbakht**, M. Babalar and M. Mirmasoumi. 2005. The effect of plant growth regulators on growth characteristics of damask rose *in vitro*. Iranian Journal of Horticultural

Books and Book Chapter

1. Nikbakht, A. and M. Pessarakli. 2014. New Approaches to Turfgrass Nutrition: Humic Substances and Mycorrhizal Inoculation. in M. Pessarakli (ed.). Handbook of Plant and Crop Physiology (Books in Soils, Plants, and the Environment) 3rd ed. CRC press.
2. Nikbakht, A., E. Kiani and N. Etemadi. 2012. Fundamental of Turfgrass Management (N. Christians). Translated into Persian from English. Isfahan University of Technology Pub. Isfahan. Iran. 434 p.
3. Nikbakht, A. and M. Kafi. 2011. The *Rosa damascena* of Iran. 2010. Isfahan University of Technology Pub. Isfahan. Iran. 161p. (In Persian).

Patent

1. Gheysari, M. and **A. Nikbakht**. 2010. Subsurface-leakage irrigation system. Patent#: 66979 at Iranian office for companies and industrial registration.

Selected International Presentations

1. **Nikbakht, A.**, N. Daneshvar-Hakimi-Maibodi, M. Kafi, and M. Pessarakli^{*}. 2013. Physiological responses and visual quality of perennial ryegrass (*Lolium perenne* L.) influenced by mycorrhizal infection and humic acid. ASA-CSSA-SSSA International Annual Meetings, Nov. 3-6, 2013, Tampa, Florida-**Oral Presentation**
2. **Nikbakht, A.**, N. Etemadi^{*}, B. Yazdani and M.M. Majidi. 2013. Application of Humic and Fulvic Acids in Nutrient Solution Affect Postharvest Characteristics of *Gerbera jamesonii* L. 28th International Horticultural Congress (IHC). 22-27 August. Lisbon, Portugal
3. Kafi^{*}, M., D. Naderi and **A. Nikbakht**. 2007. Study on two levels of Trinexapac-ethyl effects on qualitative traits of sod after storekeeping. 2nd International ISHS Conference on Turfgrass Science and Management for Sports Fields. 24-29 June. Beijing, China.
4. Haghghi, M., M. Kafi, A. Tehranifar^{*} and **A. Nikbakht**. 2006. Effects of decay level of SMC (Spent Mushroom Compost), media diameter and compound on turf culture in hydromulching method. 27th International Horticultural Congress (IHC). 13-19 August. Seoul, South Korea.
5. Haghghi^{*}, M., M. Kafi, A. Tehranifar and **A. Nikbakht**. 2005. The effect of best mulching media and cultivation time on the qualitative and quantitative characteristics of turfgrass in hydromulching system. International Symposium on Growing Media. 4-10 September. Angers, France.
6. Haghghi^{*}, M., M. Kafi, A. Tehranifar and **A. Nikbakht**. 2005. A study on replacing municipal solid waste (MSW) with spent mushroom compost (SMC) in Iran. International Symposium on

Growing Media. 4-10 September. Angers, France

7. **Nikbakht** *, A, M. Kafi and M. Haghghi. 2004. The abilities and potentials of medicinal plants production and herbal medicine in Iran. Proceeding of the 8th international plant-people symposium (IPPS), 4-6 June, Hyogo, Japan-**Oral Presentation**

Teachings

1. Turfgrass and Cover Plants (Fall Sem.). Isfahan University of Technology
2. Garden and Park Design (Spring Sem.). Isfahan University of Technology
3. Physiology of Ornamental Plants (MSc, Spring Sem.). Isfahan University of Technology
4. Planting Design and Management in Urban Landscape (MSc, Fall Sem.). Isfahan University of Technology
5. Planting Design of Special Spaces (PhD, Spring Sem.). Isfahan University of Technology

Grants and Contracts

1. **Nikbakht, A.** Designing the urban landscape of Khomeini-Shahr town. Khomeini-Shahr Municipality, Iran. 2016 to present.
2. **Nikbakht, A.** Compilation standards and executive direction on management of plants cultivation and preservation in Isfahan urban landscape parks and pathways. Isfahan Municipality, Isfahan, Iran. 2012-2016.
3. **Nikbakht, A.** Effect of mycorrhizal fungi on growth characteristics and essential oil changes of rose-scented geranium (*Pelargonium graveolens*) in complete and deficit irrigation conditions. Barij Essence Co. Kashan, Iran. 2013-2015.
4. **Nikbakht, A.** Isfahan University of Technology landscape designing and construction supervising according to water-wise landscaping principles (1st phase: 6 blocks). Isfahan, Iran. 2011-2013.
5. **Nikbakht, A.** Investigation the effect of irrigation system and water quality on growth indices of olive trees in landscape. (co-I with M. Gheysari, and R. Fernandez-Escobar (University of Cordoba, Spain). Isfahan, Iran. 2010-2012.
6. **Nikbakht, A.** Study the possibility of *Aeolesthes sarta* control on elm trees via direct trunk injection system in Isfahan urban landscape. Isfahan Municipality, Isfahan, Iran. 2009-2011.
7. **Nikbakht, A.** Controlling lime witches broom through direct trunk injection. Hormozgan, Iran. 2007-2008.

Activities

1. **Head of Department of Horticulture.** Isfahan University of Technology. 2016-present
2. **Head of Urban landscape Research Group.** Isfahan University of Technology. 2012-present.
3. **Board of Directors Member.** Iranian Society for Horticultural Science. 2011 -2014.
4. **Head and Board of Directors Member.** Greenhouse specialized committee in Isfahan province. 2015- present
5. **Scientific consultant** and co-manager of Isfahan University of Technology green area and

- landscape. (400 ha). 2010- 2014.
6. **Scientific consultant** of Department of Parks and Recreation of Isfahan Municipality. 2008-Present.
 7. **Scientific consultant** of Department of Parks and Recreation of Khomeini-Shahr Municipality. 2015- Present.
 8. **Scientific consultant** of Chamran Hospital for healing garden designing and horticultural therapy site creation. 2013-present.
 9. **Journal Editor** of Journal of Horticultural Science and Technology and Journal of Science and Technology of Greenhouse Culture
 10. **Founder of Landscape Management interdisciplinary program in Iran (MSc).**

Meetings Organized

1. Conveyer of national congress. **Greenhouse risk-assessment in Iran, 1st meeting: greenhouse structures and equipment.** March 2016. Isfahan University of Technology
2. Workshop organizer and manager. **New approaches in turfgrass stress management.** By Professor M. Pessarakli (University of Arizona). 2013. Isfahan University of Technology
3. Workshop organizer and manager. **Methods in successful international scientific article preparation and submission.** By Professor M. Pessarakli (University of Arizona). 2013. Isfahan University of Technology
4. Session organizer and co-executive director of **7th Iranian Congress for Horticultural Sciences.** 2011. Isfahan University of Technology

Work Experience

1. Azadi Grand Stadium turfgrass Manager, Tehran, Iran. 2004-2005
2. Turfgrass nursery manager (1 ha), Tehran, Iran. 2004-2005
3. Naghsh-e Jahan Stadium turfgrass manager, Isfahan, Iran. 2005

Supervised and Advised Students

1. Supervised MSc students. 25 students. Isfahan University of Technology, Iran. 2009-2016
2. Advised MSc students. 30 students at Isfahan University of Technology, Iran, 1 student at University of Tehran, Iran. 1 student at Guilan University, Iran. 2009-2016

Languages

1. Persian (Native)
2. English (IELTS 7)
3. Spanish (A)