

Amir Ali Khoddamzadeh

Department of Earth & Environment
Florida International University
11200 SW 8th St., AHC-5 391
Miami, FL 33199

Phone: 305-348-3083
Fax: 305-348-3877
akhoddam@fiu.edu

<http://earthenvironment.fiu.edu/faculty/>
<http://agroecology.fiu.edu/>

Work Experience

Instructor

August 2015

Department of Earth and Environment, Florida International University, 11200 SW 8th St.
Miami, FL 33174

Research Scholar

June 2013 to July 2015

Department of Horticulture and Landscape Architecture, Oklahoma State University

Assistant Professor

September 2012 to June 2013

Department of Plant Production Technology, Faculty of Agriculture and Natural Resources,
Ferdowsi University of Mashhad, Iran

Courses Taught

- Research methodology
- Tissue culture (+ Lab)
- Plant propagation (+ Lab)
- General botany
- Botany fundamental
- General horticulture
- Agronomy principles of medicinal and aromatic plants (+ Lab)
- Special agronomy of medicinal and aromatic plants
- Trees and ornamental shrubs

Assistant Professor

March-September 2012

Agricultural Biotechnology Research Institute of Iran, Mashhad, Iran

Team lead & Researcher

June 2011 to June 2013

Rose Biotech Knowledge-based Co., Technology Park, Ferdowsi University of Mashhad,
Iran

Graduate Teaching/Research Assistant

July 2007 to May 2011

Department of Crop Science, University Putra Malaysia

Ph.D in Agricultural Biotechnology

Dissertation: Induction of protocorm-like bodies (PLBs), synthetic seed production, and cryopreservation in *Phalaenopsis bellina* (Rchb.f.) Christenso

Research Experiences and Interests

- Molecular marker
 - Synthetic seed production and seed testing and evaluation methods
 - Plant and seed biology
 - Ornamentals
 - Medicinal plants
 - Pharmaceutical compounds
 - Tissue culture
 - Cryopreservation
 - Fruit trees
 - Gene banking
 - Precision horticulture
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Journal Publications

Google Scholar: <http://scholar.google.com.my/citations?user=6nO5OPEAAAAJ&hl=en>

Khoddamzadeh, A.A., Sinniah, U.R., Lynch, P., Kadir, M.A., Kadzimin, S.B. and Maziah, M. 2011. Cryopreservation of Protocorm-Like Bodies (PLBs) of *Phalaenopsis bellina* (Rchb.f.) Christenson by Encapsulation-Dehydration. *Plant Cell, Tissue & Organ Culture*. 107 (3): 471-481.

Khoddamzadeh, A.A., Sinniah, U.R., Kadir, M.A., Kadzimin, S.B and Maziah, M. 2011. *In-vitro* Induction and Proliferation of Protocorm-Like Bodies (PLBs) from Leaf Segments of *Phalaenopsis bellina* (Rchb.f.) Christenson. *Plant Growth Regulation*. 65 (2): 381-387.

James Antony, J.J., Sinniah, U.R., Ceong, C.L., Pobathy, R., **Khoddamzadeh, A.A.** and Sreeramanan, S. 2011. Selected potential encapsulation - dehydration parameters on *Dendrobium Bobby* Messina protocorm - like bodies using TTC analysis. *Australian Journal of Crop Sciences*. 5 (13): 1817-1822.

Sreeramanan, S., Sinniah, U.R., **Khoddamzadeh, A.A.**, Periasamy, S. and James, J. 2011. Fundamental concept of cryopreservation using *Dendrobium sonia*-17 protocorm-like bodies by encapsulation-dehydration technique. *African Journal of Biotechnology*. 10 (19): 3902-3907.

Khoddamzadeh A.A., Sinniah U.R, Kadir M.A, Kadzimin S.B, Maziah, M. and Sreeramanan, S. 2010. Detection of Somaclonal Variation by Random Amplified Polymorphic DNA Analysis During Micropropagation of *Phalaenopsis bellina* (Rchb.f.) Christenson. *African Journal of Biotechnology*. 4 (90): 6632-6639.

Khoddamzadeh, A.A., Sinniah, U.R., Kadir, M.A., Kadzimin, S.B. and Maziah, M. 2011. Synthetic Seed Production: Establishment of a Short-term Storage Method *via* Encapsulation of PLBs in *Phalaenopsis bellina* (Rchb.f.) Christenson. *Seed Science and Technology*. 39 (3): 697-702.

Zainudin, M., Julkifle, A.L., Pobathy, R., Sinniah, U.R., **Khoddamzadeh, A.A.**, James Antony, J.J. and Sreeramanan, S. 2011. Preliminary analysis on cryopreservation of *Dendrobium/ Bobby* Messina orchid using an encapsulation-dehydration technique with Evans blue assay. *African Journal of Biotechnology*. 10 (56): 11870-11878.

Under publication

- Khoddamzadeh, A.A.** and Dunn, B.L. Application of canopy sensors for nitrogen assessment management in chrysanthemum.
- Dunn, B.L. and **Khoddamzadeh, A.A.** Use of nondestructive sensors to quantify Gaillardia nitrogen status.
- Safarnejad, A., **Khoddamzadeh, A.A.**, Alamdari, S.B.L., Dunn, B.L. and Vendrame, W. Callus induction, multiplication and acclimatization of *Ficus carica* L.
- Safarnejad, A., Alamdari, S.B.L., **Khoddamzadeh, A.A.** and Dunn, B.L. Effect of different factors on micropropagation of *Ziziphus jujube* L.
- Dunn, B.L. and **Khoddamzadeh, A.A.** Evaluating nitrogen status in Geranium using reflectance based technology.
- Khoddamzadeh, A.A.**, Dunn, B.L. and Taghvaeian, S. Effects of Super-absorbent Polymers on first year Grapevine Establishment. Under submission
- Khoddamzadeh, A.A.**, Dunn, B.L. and Taghvaeian, S. Super-absorbent Polymers supplication in grapevines with emphasis on water detection sensors in Oklahoma, Fact sheet.
- Khoddamzadeh, A.A.** and Kadir, U.R. Effect of plant growth regulators on shoot induction from callus of medicinal plant *Chlorophytum Borivilianum*.

Other papers

- Khoddamzadeh, A.A.** 2007. Production technology of industrial and engine lubricant based on plants base oil. BOC Magazine, May-Jun. p17-21 (In Persian).
- Khoddamzadeh, A.A.** 2006. Soy Milk. Agriculture and Stable Extension Journal, Sep-Oct. p 17-21 (In Persian).

Conference Publications

- Khoddamzadeh, A.A.** and Dunn, B.L. 2015. Embryo rescue and artificial seed encapsulation treatments in flowers. ASHS Annual Conference. New Orleans, Louisiana.
- Khoddamzadeh, A.A.** and Dunn, B.L. 2015. *In-vitro* Conservation Methods in Rain lilies. ASHS Annual Conference. New Orleans, Louisiana.
- Khoddamzadeh, A.A.** and Dunn, B.L. 2015. Evaluating the impact of Superabsorbent Polymers on grapevine water management. ASHS Annual Conference. New Orleans, Louisiana.
- Khoddamzadeh, A.A.** and Dunn, B.L. 2015. Cultivar evaluation and precision water assessment in grapevine. ASHS Annual Conference. New Orleans, Louisiana.
- Khoddamzadeh, A.A.** and Dunn, B.L. 2014. Embryo rescue and synthetic seed production in rain lilies. ASHS Annual Conference. Orlando, Florida.
- Khoddamzadeh, A.A.** and Dunn, B.L. 2014. Artificial seed and cryopreservation in horticultural crops. ASHS Annual Conference. Orlando, Florida.

- Khoddamzadeh, A.A.** and Dunn, B.L. 2014. Application of precision agriculture technology to determine N level in Chrysanthemum. ASHS Annual Conference. Orlando, Florida.
- Khoddamzadeh, A.A.** 2014. Plant genebanking in the Middle East and South East Asia, Its Potentials and Challenges. International Division, American Society for Horticultural Science. ASHS Annual Conference. Orlando, Florida.
- Roustami, M., Rasam, G.A. and **Khoddamzadeh, A.A.** 2013. Investigations on the cardinal temperatures for germination of two weeds; *Xanthium strumarium* L. and *Hyoscyamus niger* L. 5th Iranian Weed Science Conference. August 24-26. Proceeding paper, University of Tehran, Iran.
- Khoddamzadeh, A.A.** and Safarnejad, A. 2012. Cryopreservation and synthetic seed production. 3rd Iranian Agricultural Biotechnology Conference. Sep 3-5. Proceeding paper (keynote speaker), Ferdowsi University of Mashhad, Iran.
- Khoddamzadeh, A.A.** and Safarnejad, A. 2012. Ornamental Preseravtions. 3rd Iranian Agricultural Biotechnology Conference. Sep 3-5. Proceeding paper, Ferdowsi University of Mashhad, Iran.
- Zarghami, R., Hesar, N., Seif, E. and **Khoddamzadeh, A.A.** 2012. Evaluation of different IBA hormone treatments on rooting of Elberta cultivar in Peach. 3rd Iranian Agricultural Biotechnology Conference. September 3-5. Proceeding paper, Ferdowsi University of Mashhad, Iran.
- Moghimi, Z, Safarnejad, A. and **Khoddamzadeh, A.A.** 2012. Calluse induction and proliferation and flavonoid compounds extraction in *Crataegus* spp. 3rd Iranian Agricultural Biotechnology Conference. September 3-5. Proceeding paper, Ferdowsi University of Mashhad, Iran.
- Khoddamzadeh, A.A.**, Sinniah, U.R and Ghafoori, M. 2010. Genetic, Analysis of Somaclonal Variation during Multiplication in Orchid. 16th National and 4th International Conference of Biology. September 14-16. Proceeding paper, Ferdowsi University of Mashhad, Iran.
- Khoddamzadeh, A.A.**, Sinniah, U.R, Kadir, M.A, Kadzimin, S.B and Maziah, M. 2009. Effect of different media with organic additives on growth of protocorm like bodies (PLBs) in *Phalaenopsis bellina*. Agriculture Congress. October 27-29. Proceeding paper, Selangor, Malaysia. Y57.
- Khoddamzadeh, A.A.**, Sinniah, U.R., Zarghami, R., Daneshian, J., Hamidi, I. and Hadi, H. 2007. Seed Quality of Soybean [*Glycine max* (L.) Merr] Cultivars and Lines harvested from plants subjected to drought stress. 5th seed symposium. IOI resort, Malaysia. Proceeding paper.
- Hadi, H., Daneshian, J., Jonubi, P., **Khoddamzadeh, A.A.** 2007. The relationship between sensitivity and drought tolerance of soybean genotypes under limited irrigation. Second National Conference of drought impacts and management strategies.
- Javadi, A., Dashti, A., **Khoddamzadeh, A. A.** and Sazandehchi, P. 2007. Production of Organic Sulphur Fertilizer from Hydrolyzed Bagasse. Second Sugar Cane Technologist seminar Proceeding paper.

Khoddamzadeh, A.A., Dunn, B.L. and Taghvaeian, S. 2014. Precision agriculture in vineyard, Poster Under submission.

Funding Activities

- Cultivar Evaluation and Precision Water Assessment in Grapevine with the emphasis on Super-absorbent Polymers, PI
Funding Source: Oklahoma Viticulture and Enology
Total budget: \$24,976. 2015 (Awarded)
- Effects of super-absorbent polymers on grapevine transplant cultivars, PI
Funding Source: Oklahoma Viticulture and Enology
Total budget: \$20,616. 2014 (Awarded)
- Synthetic seed production in medicinal plant, PI
Funding Source: NSF Program: Biotechnology, Biochemical, and Biomass Engineering
Total budget: \$62,000. (pending)
- Callus induction, multiplication and acclimatization of fig tree, Co-PI
Funding Source: Ferdowsi University of Mashhad's faculty startup grant
Total budget: Approximately \$10,000. 2012 (Awarded)
- Investigations on the cardinal temperatures for germination of five medicinal plants, PI
Funding Source: Iran's medicinal plant Association
Total budget: Approximately \$2,000. 2012 (Awarded)
- Commercial saffron tissue culture protocol optimization (Co-PI) + tissue culture propagation of promising selected clones (PI) + selection of superior clone's regional experiment (Co-PI)
Funding Source: Agricultural Biotechnology Research Institute of Iran
Total budget: Approximately \$56,000. 2012-2015 (Awarded)
- Comprehensive study of drug metabolites and introduce the best jujube, PI
Funding Source: Agricultural Biotechnology Research Institute of Iran
Total budget: Approximately \$10,000. 2012-2013 (Awarded)
- Study of genetically potential of berberis in order to gene bank preservation, PI
Funding Source: Agricultural Biotechnology Research Institute of Iran
Total budget: Approximately \$11,000. 2012-2014 (Awarded)
- Introducing the finest berberis based pharmaceutical aspects and food ingredients, Co-PI.
Funding Source: Agricultural Biotechnology Research Institute of Iran
Total budget: Approximately \$10,000. 2012-2014 (Awarded)

Journal Review

- Natural Product Research
- PLOS ONE
- Journal of the American Society for Horticultural Science
- Molecular Biology Reports
- Scientia Horticulturae
- African Journal of Biotechnology
- World Applied Sciences Journal

Awards and Member of Groups and Associations

- Winner of Early Career Young Faculty Competition. American Society for Horticultural Science Annual Conference, August 4-7, 2015, New Orleans, LA.
- American Society for Horticultural Science
- Society for *In Vitro* Biology
- The Society for Conservation Biology

Software Skills

- SAS analyzing software
- Gene Tools of Syn Gene package
- Bioedit software
- Uvi Doc software
- NTsys pc 2.0, NTedit
- Microsoft Office