Dr. Salman Al-Kofahi
Head of Lands Management & Environment Dep.
Faculty of Natural Resources & Environment
Hashemite University, P.O. Box 150459
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EDUCATION

Jan. 2008-May, 2011 Ph.D., Plant and Environmental Sciences, College of Agriculture, New Mexico State University (NMSU), Las Cruces, New Mexico State (NM), USA.
Major: **Plant and Environmental Sciences**.
Specialization: Vegetation classification, plant and water budget.
Dissertation: **Mapping Land Cover in Urban Residential Landscape: Implications for Water Budget Calculations.**
GPA: 4.0 on a scale of 4.0.

Minor in Applied Statistics, Applied Experimental Statistics Department, NMSU, Las Cruces, NM, USA.
GPA: 4.0 on a scale of 4.0.

Sep. 2001-Jan. 2003 M.S., Plant Production, College of Agriculture, Jordan University of Science and Technology, Irbid, Jordan.
Specialization: Agronomy (Field Crops Production).
Dissertation: Relationship between Seed Vigor Tests and Field Performance of artificially aged Barley seeds.
Grade: 90%.

Feb. 1998-Jun. 2001 B.S., Plant Production, College of Agriculture, Jordan University of Science and Technology, Irbid, Jordan.
Grade: 82%.

EXPERIENCES AND ACHIEVEMENTS

Sep. 2019- Now	Head of Lands Management and Environment Department\Prince Al-Hasan Bin Talal for Natural Resources and Environment/ Hashemite University, Zarqa, Jordan.
Sep.2014- Jun. 2016	Full time lecturer at Land Management and Environment Dept./ Faculty of Natural Resources and Environment/ Hashemite University, Zarqa, Jordan.
Jun. 2016- Now	Assistant professor at Land Management and Environment Dept./ Faculty of Natural Resources and Environment/ Hashemite University, Zarqa, Jordan.
Nov. 2017-now	Partner at the Geodesy and geoinformatics for sustainable development in Jordan (GEO4D). Erasmus+ Programme of the European Union.
Sep. 9, 2017	Awarded “Expert Rank in Plant Production” – University Academic Sector” from the Jordanian Agriculture Engineering Association, Amman, Jordan.
Apr. 14, 2017	Speaker in the workshop of remote sensing and GIS applications in natural resources management, Faculty of Natural resources and environment/ Hashemite University, Zarqa, Jordan.
Jun. 2015-Dec. 2015	Researcher in “Local Sat” project supported by the European Union.
20th and 21st October 2015	International Specialized Conference: The Use of Geospatial Technologies for City Sustainable Management. Organized by Jordan university of Science and Technology. Dead Sea Spa Hotel (Dead Sea, Jordan).
Sep. 2015	2-days GIS trainer under “Local Sat” project supported by the European Union at labs of Jordan University of Science and Technology.

9th May 2015	National Conference for National Master Plan to Rehabilitate the Jordan River Valley. 9th May, 2015. Ministry of Water and Irrigation, Royal Haskoning DHV, EcoPeace Middle East, SIWI, GNF, EU. Crown Plaza Hotel, Dead Sea, Jordan.
Jan. 2015- Now Feb. 2012- Sep. 2012	Lecturer in the Urban Planning, City planning and design Departments, College of Architecture and design, Jordan University of Science and Technology (JUST), Irbid, Jordan. Teaching the following courses, Master's level: Environmental Planning and Management Special Topics in Urban Planning Bachelor's level: Geographic Information System (GIS) Sustainable Development Urban Ecology
Sep. 2012- Sep, 2014	International Baccalaureate Diploma Instructor, Subject: Environmental Systems and Societies- Naseem Internationals, Bahrain.
May 23, 2013	Invited as a speaker in the Seminar Event by the College of Biology / University of Bahrain, Kingdom of Bahrain. (http://www.uob.edu.bh/english/pages.aspx?module=pages&id=3501&SID=463).
Jan. 2008-May, 2011	Researcher on projects titled "Using Vegetation Extraction Software to Classify Urban Residential Landscapes in Albuquerque" and "New Approaches in Residential Landscape Water Budget Calculations".
Jan. 2009-May, 2011	Laboratory Safety Officer, responsible of conducting periodic environmental, health, and safety audits and ensure safe handling and dealing with laboratory chemicals in the plant physiology lab/College of Agriculture.

Aug. 2010-Jan. 2011 Teaching Assistant in Environmental Physiology of Plants, Plant and Environmental Sciences, College of Agriculture, New Mexico State University.

Apr. 2004- Jan. 2007 Working in administration and translation of agricultural related works in Qatar International Trading Company, Doha, Qatar. In addition, a part time job in Agriculture Engineer in Al-Salwly Qatar landscapes Company, Doha, Qatar.

Oct. 2003- Feb. 2004 Research Assistant and Teaching Assistant in Plant Production Dept., Jordan University of Science and Technology, Irbid, Jordan. These courses included:
Introduction to Plant Science,
Seed Production Technology,
Field Crop Science, and
Plant Physiology.

PUBLISHED ARTICLES

Gharaibeh, A., Shaamala, A., Obeidat, R., **Al-Kofahi, S.** (2020). Improving land-use change modeling by integrating ANN with Cellular Automata-Markov Chain model. Heliyon 6: E05092; https://doi.org/10.1016/j.heliyon.2020.e05092

Hatamleh, R., Jamhawi, M., **Al-Kofahi, S.** (2020). The Use of a GIS System as a Decision Support Tool for Municipal Solid Waste Management Planning: The Case Study of Al Nuzha District, Irbid, Jordan. Procedia Manufacturing 44 (2020) 189–196

Al-Kofahi, S., Gharaibeh, A., Bsoul, E., Othman, Y., St. Hilaire, R. (2019). Investigating domestic gardens' densities, spatial distribution and types among city districts. Urban Ecosystems, 22(3), 567-581. https://doi.org/10.1007/s11252-019-0833-7.

Sawalhaha, M., **Al-Kofahi, S.,** Othman, Y., Cibils, A. (2018). Assessing rangeland cover conversion in Jordan after the Arab spring using a remote sensing approach. Journal of Arid Environment, 157: 97-102.

Al-Hammouri, A., **Al-Kofahi, S.,** Ibbini, J., Abusmier, S., Sanogo, S. (2018). Effect of biofumigation by *Calligonum polygonoides*, dry olive leaves, and ash of olive leaves on chilli pepper growth and recovery of *Rhizoctonia solani*. Acta agriculturae Slovenica, 111(1):41-49.

Al-Kofahi, S., Hammouri, N., Sawalhah, M., Al-Hammouri, A. and Aukour, F. (2018). Assessment of the urban sprawl on agriculture lands of two major municipalities in Jordan using supervised classification techniques. Arabian Journal of Geosciences, 11(3): 1-12.

Al-Kofahi, S., Jamhawi, M. and Hajahjah, Z. (2018). Investigating the current status of Geospatial Data and urban growth indicators in Jordan and Irbid Municipality: Implications for Urban and Environmental Planning, Environment, Development and Sustainability Journal, 20(3): 1067-1083 [Doi: 10.1007/s10668-017-9923-y]

Aukour, F., Bani Hani, N., **Al-Kofahi S.,** Abu Smeir, S. (2018). The Effects of Biosolid Application on Water-Use Efficiency and the Growth Behavior of Sesbania sesban (L.) Merr in Arid Mediterranean Environments. Jordan Journal of Earth and Environmental Sciences, 9(3), 134-138.

Bani-Melhem, K., Al-Shannag, M., Alrousan, D., **Al-Kofahi, S.,** Al-Qudah, Z., and Al-Kilani, M. (2017). Impact of Soluble COD on Grey water Treatment by Electrocoagulation Technique. Desalination and Water Treatment, 89:101-110.

Al-Ghzawi, A., Juma'a, K., Al-Rawashdeh, I., **Al-Kofahi, S.,** and Bsoul, E. (2016). Diversity of herbaceous plant communities and Artemisia herba-alba Asso. at different governorates' open-lands in Jordan. Bulgarian Journal of Agricultural Sciences, 22(6): 897–905.

Bsoul, E., Jaradat, S., **Al-Kofahi, S.,** Al-Hammouri, A. and Alkhatib, R. (2016). Growth, water relation and physiological responses of three eggplant cultivars under different salinity levels. Jordan Journal of Biological Sciences, 9(2): 123-130.

Al-Kofahi, S., Steel C., VanLeeuwen D., St. Hilaire R. (2012). Mapping land-cover in urban residential landscapes of a desert city using Fine Resolution Imagery. Urban Forestry and Urban Greening Journal, 11/3: 291-303.

Al-Kofahi, S., St. Hilaire, R., VanLeeuwen, D., Zohrab, S. (2012). A water budget calculator created for residential urban landscapes in Albuquerque, New Mexico. Irrigation and Drainage Engineering Journal, 138:525-533.

Al-Kofahi, S., St. Hilaire, R. (2011). A water budget calculator created for residential urban landscapes using novel approaches. Irrigation Association: Innovations in Irrigation, November 6-8, 2011, San Diego, CA, USA.

Samarah, N., **Al-Kofahi, S.** (2008). Relationship of seed quality tests to field emergence of artificial aged barley seeds in the semiarid Mediterranean region. Jordan Journal of Agricultural Sciences, 4 (3): 217-230.

Samarah, N., **Al-Kofahi, S.** (2006). Effect of aging on seedling emergence and establishment of barley under soil moisture stress. Seed Research, 34 (2): 128-133.

PUBLISHED ABSTRACTS

Al-Kofahi, S. (2017). Assessment of the spatial and temporal urban expansion on agricultural lands of major cities of Jordan using GIS and ENVI classification technique. National Research Center. International conference on "Advanced Technologies and their Applications in Agriculture". Cairo, Egypt. March, 27-29, 2017. P.75.

Al-Kofahi, S., Steele, C., VanLeeuwen, D., Samani, Z., Hilaire, R., (2011). Using the knowledge of residential landscape vegetation spatial variability to support water conservation. In: American Water Resources Association: Annual Water Resources conference. Albuquerque, New Mexico, USA, November 7-10, 2011, P.7.

Al-Kofahi, S., St. Hilaire, R., Samani, Z., Bean, M., and Santon, L. (2010). Creating a landscape water budget calculator for a desert city. In: American Society for Horticulture Science Conference. Palm Desert, California, USA, August 2-5, 2010. HortScience, 45(8): S262.
Invited poster to the 51st International Plant Propagation Society, September 8-11, 2010 Bellingham, WA, USA.

Al-Kofahi, S., Steele, C., VanLeeuwen, D., and St. Hilaire, R. (2010). Mapping land cover in urban residential landscapes using fine resolution imagery and object-oriented classification.
Also In: American Society for Horticulture Science Conference. Palm Desert, California, USA, August 2-5, 2010. HortScience, 45(8): S93.

Al-Kofahi, S., Garfin, G., Fraisse, C., Bean, M., St. Hilaire, R. (2009). Establishing a decision making tool to reduce drought vulnerability in residential urban landscapes. In: American Society for Horticulture Science Conference. St. Louis, Missouri, USA, 25-28 July, 2009. HortScience, 44: 1162.

ATTENDED WORKSHOPS:

Oct. 8-9, 2018 Regional seminar on nutrient stewardship for West Asia and North Africa

RESEARCHES IN PROGRESS

- Investigating biodiversity and residential landscape biodiversity in urban areas.

SUPERVISION OF POSTGRADUATE STUDENTS

Investigating plant cover biodiversity in protected and non-protected semi-arid Mediterranean ecosystem. Student Ahmad Abu-Dkhinah, Land Management and Environment. Natural Resources and Environment College, April 23, 2020.

Mapping land cover and biodiversity in Residential landscapes in Amman city, Student: Amani Kafawin, Master's degree in climate change and arid land sustainability, Deanship of graduate studies. Department of Land management and environment, Natural Resources and Environment College, Sep, 2019.

Evaluation of the seed vigor of Jojoba seeds of different ages & seed sizes and feasibility of Jojoba planation in Jordan. Student: Mod Noor, Master's degree in climate change and arid land sustainability, Deanship of graduate studies. Department of Land management and environment, Natural Resources and Environment College, Feb, 2018.

Improving Municipal Solid Waste Management by introducing Geographic Information System, (A Case Study in Irbid, Jordan). Student: Heba Nsair, awarded Master in Architectural Engineering, Faculty of Graduate Studies, Jordan University of Science and Technology, February, 2017.

A COMMITTEE MEMBER IN POSTGRADUATE STUDENTS DEFENSE

- Improving the Capability of Integrated Cellular Automata-Markov Model to Simulate Future Urban Growth Using Artificial Neural Network. Student: Abdulrazzaq Hasan Mohammed Shaamala, awarded Master in Urban Planning and Studies, 2019. Department of Urban Planning, College of Architecture and Design/ Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan.

- Geographic Information System (GIS) Based Approach of Spatial Planning for Evaluating Site Suitability for Wind-Energy Site Potential in Jordan, Strategic Regional Planning. Student: Deema Al-Shboul , awarded Master in Urban Planning and Studies, 2019. Department of Urban Planning, College of Architecture and Design/ Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan.

- The Use of Neural Networks and Suitability Analysis for Assessing the Urban Growth for the City of Irbid. Student: Lamees Mahmoud Kana'an, awarded Master in Urban Planning and Studies, 2017. Department of Urban Planning, College of Architecture and Design/ Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan.

- Investigating Rehabilitated Streets in Amman: Measuring Urban Design Qualities and Walkability. Student: Iqbal Jalal Batayneh, awarded Master in Urban Planning and Studies, 2017. Department of Urban Planning, College of Architecture and Design/ Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan.

- Landuse/Landcover Change Detection in Northern Jordan Using Remote Sensing. Student: Maha Mahmoud Ghuzlan, awarded Master Thesis in Natural Resources and Environment, 2017. Department of Natural Resources and environment, College of Agriculture / Faculty of Graduate Studies, Jordan University of Science and Technology, Irbid, Jordan.

- Water Disinfection by Solar Energy. Student: Esra’a Ahmed Al-Turk, awarded Master in Climate Change and Arid Land Sustainability, 2016. Department of Lands Management and Environment, College of Natural Resources and Environment, Faculty of Graduate Studies, Hashemite University. Zarqa, Jordan.

- A Theoretical Study of Municipal Solid Waste Characterization in Jordan and its Economic Feasibility. Student: Mahmoud Ibrahim Al-Shorman, awarded Master in Environmental Science and Management, 2015. Department of Water Management and Environment, College of Natural Resources and Environment, Faculty of Graduate Studies, Hashemite University, Zarqa, Jordan.

SKILLS

Geographic information System (GIS): Experience in many GIS tools and applications.
Remote Sensing: Experience working with Feature Extraction software (ENVI EX 4.7) from ITT Visual Information Solutions Company, and aerial photos.

SPECIALIZED COURSES

Sep. 2-13, 2019	'Engineering Applications of Geomatics' Training Course in the frame of the GEO4D Erasmus+ project, Politecnico Di Milano, Italy.
Jun. 18-29, 2018	'GIS Training Course' in the frame of the GEO4D Erasmus+ project, Politecnico Di Milano, Italy.
July, 2012	Piloting Climate Change Adaptation to Protect Human Health in Jordan Project**:** Adaptation through Safe Use of Treated Wastewater: July 9-11 (World Health Organization).
December, 2011	Landscape Design Using AutoCAD/ Agriculture Association: 10-hours course.
February, 2011	Cartographic Design Using ArcGIS 9 / ESRI Foundation: 21-hours course.
July, 2010	Interdisciplinary Modeling of Water Issues and Changing Climate, University of Nevada, Reno: 3-credit regular summer class.
March, 2010	Working with Rasters in ArcGIS Desktop / ESRI Foundation: 9-hours course.
October, 2009	Exploring ENVI / ITT-Visual Information Solutions: 4-days training class.
February, 2009	Protecting Human Research Participants / National Institutes of Health Office of Extramural Research, NMSU.
February, 2009	ArcGIS Desktop Course / ESRI Foundation: 24-hours course.

AWARDS AND HONORS

2011	Honors Graduate Certificate from New Mexico State University Graduate School in recognition of outstanding academic success and maintaining the highest graduate grade point of 4.0.
2010-Now	Research Member in the Climate Assessment of the Southwest / University of Arizona.
2010-2011	Merit-based Enhancement Award offered from the Graduate School for outstanding graduate assistant, NMSU.
2010-2011	Wilson Marvin Award offered from Plant and Environmental Sciences Dept., College of Agriculture, NMSU.
2009-2010	Melton D. Billy Award offered from Plant and Environmental Sciences Dept., College of Agriculture, NMSU.
2008-2009	Herrera E. A. Award offered from Plant and Environmental Sciences Dept., College of Agriculture, NMSU.
2008-2011	Internship and Research Assistantship on a PhD Project Funded from the National Oceanic and Atmospheric Administration (NOAA), Climate Assessment of Southwest (CLIMAS), and Southeast Climate Consortium.
2007-Now	A member in the Jordanian Agriculture Engineering Association.

REFERENCES

1. Professor Rolston St. Hilaire, Department of Plant and Environmental Sciences, New Mexico State University. Phone (001-575) 646-3638; Email: rsthilai@nmsu.edu .
2. Professor Caiti Steele, Jornada Experimental Range Experimental Station, USDA, Las Cruces, New Mexico State. Phone (001-575)-646-4144; Email: caiti@nmsu.edu .
3. Professor Dawn VanLeeuwen, Agricultural Experiment Station Statistician, New Mexico State University, E-mail: vanleeuw@nmsu.edu .
4. Professor Zohrab Samani, Department of Civil Engineering, New Mexico State University. Phone (001-575) 646 3802; Email: zsamani@nmsu.edu .