University of Tabriz Soil Science Department, Faculty of Agriculture, University of Tabriz, 5166616471, Tabriz, Iran

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Curriculum Vitae

Dr. Farzin Shahbazi, Associate Prof.
Soil Genesis, Classification and Land Evaluation - Digital Soil Mapping
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1- Educational background:

1-1-PhD (Field of Soil Genesis, Classification and Evaluation), received in 2008. University of Tabriz. Title of dissertation: Assessing MicroLEIS DSS application as a new method in land suitability evaluation (casestudy: south part of Ahar region).

1-2-M.Sc. (Field of Soil Genesis, Classification and Evaluation), received in 2002. University of Tabriz. Title of thesis: Qualitative evaluation of land suitability in Khusheh-Mehr region of Bonab for wheat, barley, alfalfa, onion, sugarbeet and maize.

1-3-B.Sc. (Field of Soil Science), received in 1996. University of Tabriz.

2- Sabbatical leave:

2-1-School of Life and Environmental Science, the University of Sydney, Australia. 2017-2018: **Digital Soil Mapping**, under supervision of **Prof. Alex McBratney**. Working group with **Prof. Budiman Minasny** and **Dr. Brendan Malone**.

2-2-IRNASE, CSIC, Seville, Spain, 2007-2008. Learning and application **MicroLEIS DSS**, under supervision of **Prof. Diego de la Rosa**. Working group with Dr. Maria Anaya Romero.

3- Teaching experiences:

- 3-1- General soil science
- 3-2-Soil surveying and mapping
- **3-3-** Land evaluation
- **3-4-**Advanced soil genesis and classification
- 3-5- Aerial photo interpretation
- **3-6-** Applied GIS in soil science
- **3-7-** Digital Soil Mapping (preferably with R)

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4- Master of Science and Doctorate Students Advisees/Supervisees:

> 60 students so far.

5- Research activities:

- **5-1-** Urmia Lake restoration program. Granted by the organization of Urmia Lake restoration. University of Sharif, Tehran. **2014-2016**.
- **5-2**-Detailed soil surveying and introducing the suitable medicinal plants in Sarab Medicinal and Industrial Plants Seed Production Station. Granted by the East Azerbaijan Natural Resources Organization. **2011-2013**.
- **5-3-**Applying ArcGIS Geostatistical Analyst for zoning of some soil biological indices in Naghadeh region, Iran. Granted by the University of Tabriz, **2010-2012**.
- **5-4-**Erosion and contamination impacts on Land vulnerability evaluation in Souma area, using MicroLEIS DSS. Granted by the University of Tabriz, **2009-2010.**
- **5-5-** Optimum land use planning in Souma area (Iran), using MicroLEIS DSS. Granted by the University of Tabriz, **2008-2009.**

6- Publications/ Book or Book chapter:

- **6-1-Shahbazi, F.,** Anaya-Romero, M., Braimoh, A.K., and de la Rosa, D., 2014. Sustainable land use planning in west Asia using MicroLEIS Decision Support Systems. In: Braimoh, A.K. and Huang, H.Q. (Eds.), Vulnerability of Land Systems in Asia. John Wiley and Sons, New York, pp. 179-194.
- **6-2-Shahbazi, F.** and Malekian, A. 2013. Soil Genesis and Classification. University of Payame Noor Publication (in Persian).
- **6-3**-Shahbazi, F., Jafarzadeh, A.A. de la Rosa, D. and Anaya-Romero, M. 2013. Soil erosion assessment and scenario analysis by using ImpelERO model in east Azerbaijan province, Iran. In: Academy Publish editing, USA, pp. 51-63.
- **6-4-Shahbazi, F.** and de la Rosa, D. 2010. Towards a new agriculture for the climate change era in west Asia, Iran. In: Simard, S.W. and Austin, M.E. (Eds.), Climate Change and Variability. SCIYO Publishing, Croatia, pp. 337-364.
- **6-5-**Mousavi, S.B. and **Shahbazi, F.** 2016. Translated Book in Persian: Guidelines for Surveying Soil and Land Resources. CSIRO Publications, Published by the University of Maragheh, Iran.

7- Recently Publications/National and International Journals:

2020:

Mousavi, A, <u>Shahabzi, F.</u>, Oustan, S., Jafarzadeh, A.A., and Minasny, B., 2020. Spatial distribution of iron forms and features in the dried lake bed of Urmia Lake of Iran. **Geoderma Regional**, https://doi.org/10.1016/j.geodrs.2020.e00275

2019:

<u>Shahbazi, F.,</u> McBratney, A., Malone, B., Oustan, S., and Minasny, B., 2019. Retrospective monitoring of the spatial variability of crystalline iron in soils of the east shore of Urmia Lake, Iran using remotely sensed data and digital maps. **Geoderma 337, 1196-1207**.

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<u>Shahbazi, F.,</u> Hughes, P., McBratney, A., Minasny, B., and Malone, B., 2019. Evaluating the spatial and vertical distribution of agriculturally important nutrients — nitrogen, phosphorous and boron — in North West Iran. **Catena 173, 71-82**.

Pouladi, P., Jafarzadeh, A.A., <u>Shahbazi, F.,</u> and Ghorbani, M.A., 2019. Design and implementation of ahybrid MLP-FFA model for soil salinityprediction. <u>Environmental Earth Sciences</u> 78: 159. https://doi.org/10.1007/s12665-019-8159-6.

Ghebleh Goydaragh, M., Jafarzadeh, A.A., <u>Shahbazi, F.,</u> Oustan, S., Taghizadeh-Mehrjardi, R., and Lado, M., 2019. Estimation of elemental composition of agricultural soils from West Azerbaijan, Iran, using mid-infrared spectral models. **Revista Brasileira de Engenharia Agrícola e Ambiental 33, 460-466.**

Sheidai Karkaj, E., Sepehry, A., Barani, H., Motamedi, J., and <u>Shahbazi, F.,</u> 2019. Establishing a suitable soil quality index for semi-arid rangeland ecosystems in northwest of Iran. <u>Journal of Soil Science and Plant Nutrition 19, 648–658.</u>

2018:

<u>Shahbazi, F.,</u> Huang. J., McBratney, A., and Hughes, P., 2018. Allocating soil profile descriptions to a novel comprehensive soil classification system. **Geoderma 329, 54-60**.

Seyedmohammadi, J., Sarmadian, F., Jafarzadeh, A.A., Ghorbani, M.A., and <u>Shahbazi, F.,</u> 2018. Application of SAW, TOPSIS and fuzzy TOPSIS models in cultivation priority planning for maize, rapeseed and soybean crops. **Geoderma 310, 178-190**.

Jafarzadeh, A.A., Rezaei, H., <u>Shahbazi, F.,</u> and Alijanpour, A., 2018. The role of forest type on soil evolution and revitalization in Arasbaran region, Iran. <u>Journal of Environmental Research and Development 12, 359-401.</u>

Norouzi, M., Jafarzadeh, A.A., Ramezanpour, H., <u>Shahbazi, F.</u>, and Khaledian, M., 2018. Micromorphological aspects of flooded soils in Masoule Rudkhan watershed, north of Iran. Carpathian Journal of Earth and Environmental Sciences 13, 343 – 358.

Montakhabi Kalajahi, V., Jafarzadeh, A.A., Oustan, S., <u>Shahbazi, F.,</u> and Arab Belaghi, R., 2018. Soil Taxonomy (ST) and World Reference Base (WRB) systems proficiency to describe saline and gypsiferous soils properties in some region of East Azerbaijan. Water and Soil Science 1, 55-67. (in Persian)

Niknam, P., <u>Shahabzi, F.,</u> Oustan, S., and Sokouti, R., 2018. Using Microleis DSS to assess the impact of climate change on land capability in the Miandoab plain, Iran. <u>Carpathian Journal of Earth and Environmental Sciences</u> 13, 225 – 234.

Khamseh, A., <u>Shahbazi, F.,</u> Oustan, S., Najafi, N. and Davatgar, N. 2018. Impactof tailings damfailure on spatial features of copper contamination (Mazraeh mine area, Iran). **Arabian Journal of Geosciences 10:244.** DOI 10.1007/s12517-017-3040-y.

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Seyedmohammadi, J., Jafarzadeh, A.A., Sarmadian, F., <u>Shahbazi, F.</u>, and Ghorbani, M.A., 2018. Applying ELECTRE TRI and Parametric Methods in an area of Dasht-e-Moghanland for suitability evaluation of maize cultivation under sprinkler irrigation. **Water and Soil Science 2, 121-137.(in Persian)**

Kaboudi, S., <u>Shahbazi, F.</u>, Aliasgharzad, N., Najafi, N., and Davatgar, N., 2018. Effect of land uses on soil microbial community and spatial variability in Mirabadlands, Naghadeh. <u>Journal of Water and Soil 31, 1602-1610. (in Persian)</u>

Mohammadi, S., Jafarzadeh, A.A., <u>Shahbazi, F.</u>, and Rezaei, H., 2018. Semi quantitative review of soil evolution based on morphological and micromorphological studies in Goharan Khoy region. **Water and Soil Science 3, 1-11. (in Persian)**

2017:

Seyedmohammadi, J., Sarmadian, F., Jafarzadeh, A.A., <u>Shahbazi, F.</u> and Ghorbani, M.A. 2017. Comparing the efficiency of TOPSIS, AHP and Square Root methods in cultivation priority determination for wheat, barley and maize under sprinkler irrigation in Dasht-e-Moghan. **Water and Soil Science 27, 45-59. (in Persian)**

2016:

<u>Shahbazi, F.,</u> Rezaei, H., Alidokht, L., Heidari, S., Kazemi, Z., and Mahdavi, S.M., 2016. Impact of sampling density on efficiency of soil salinity map (A case study: Karkaj Research Station, University of Tabriz). **Journal of Water and Soil Conservation 23, 239-251. (in Persian)**

Ganbarie, E., Jafarzadeh, A.A., <u>Shahbazi, F.,</u> and Servati, M., 2016. Comparison of AEZ, Wageningenand Alberomodels for maizepotential production prediction in northwest of IRAN.**Biological Forum 8, 484-492.**

Amirian, F., Jafarzadeh, A.A., <u>Shahbazi, F.,</u>Ghorbani, M.A., and Servati, M., 2016.Application of theFuzzy Sets theory and FAO method on suitability and clustering of land units in Marand region for sunflower and canola products. **Water and Soil Science 26, 273-290. (in Persian)**

Razmjoo, M., <u>Shahbazi, F.</u>, Jafarzadeh, A.A. and Moghadam Vahed, M., 2016. Site speciation of susceptible strata for damask rose cultivation (Case study: Sarab Medicinal and Industrial Plants Seed Production Station). **Water and Soil Science 26, 197-212. (in Persian)**

Sabri, M., Neyishabouri, M.R., Ghorbani, M.A., <u>Shahbazi, F.,</u> and Valizadeh, K., 2016. Estimation of soil quality indices and its uncertainty using Bootstrap-based Artificial Neural Networks (BANNs). Water and Soil Science 26, 173-187. (in Persian)

Rezaei, H., Jafarzadeh, A.A., Alijanpour, A., <u>Shahbazi, F.</u>, and Valizadeh Kamran, K. 2016. Genetically evolution of Arasbaran Forests soils along altitudinal transects of Kaleybar Chai Sofla sub-basin. **Water and Soil Science 26, 151-166. (in Persian)**

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Ganbarie, E., Jafarzadeh, A.A., <u>Shahbazi, F.,</u> and Servati, M., 2016. Comparing parametric methods the Square Root and the Storie) with the Fuzzy Set theory for land evaluation of Khaje region for wheat. <u>International Journal of Advanced Biotechnology and Research 7, 343-351.</u>

Khamseh, A., Oustan, S., <u>Shahbazi, F.</u>, Najafi, N., and Davatgar, N., 2016. The relationships between Cu contamination and soil characteristics in downstream of Mazra'eh Copper Mine (Ahar-East Azarbaijan). **Water and Soil Science 26, 95-112. (in Persian)**

Sabri, M., Neyshabouri, M.R., Ghorbani, M.A., <u>Shahbazi, F.,</u> Valizadeh, K., and Farajnia, A., 2016. Improved index points of soil moisture retention curve estimation using remote sensing data and the use of Bayesiannetworks and Artificial NeuralNetwork. **Water and Soil Science 26, 75-91. (in Persian)**

Zeinali, M., Jaafarzadeh, A.A., **Shahbazi, F.**, Oustan, S., and Valizadeh Kamran, K., 2016. Assessing soil surface salinity with basic pixel data sensor TM. **Biological Forum 8, 190-198.**

Zeinali, M., Jaafarzadeh, A.A., <u>Shahbazi, F.,</u> and Oustan, S., 2016. Qualitative, quantitative and economic evaluation of land suitability for wheat, barley, maize and sunflower in part of Khoy plain. **Water and Soil Science 25, 15-29. (in Persian)**

Further previously published articles, please visit in Google Scholar via the following address:

https://scholar.google.com/citations?user=JQNZmbUAAAAJ&hl=en

8- Presentations/International Congress:

<u>Shahabzi, F.</u> and McBratney, A., 2019. Key Concepts of Soil Physics: Development, Current Applications and Future Prospects. Lomonosov Moscow State University, Moscow, **Russia**.

Pouladi, P., Jafarzadeh, A.A., **Shahbazi, F.,** Ghorbani, M.A., and Greve, M.H., 2019. Assessing the soil quality index as affected by two land use scenarios in Miandoab region. Izmir, **Turkey**.

Jafarzadeh, A.A., Montakhabi Kalajahi, V., Oustan, S., <u>Shahbazi, F.,</u> and Arab Belaghi, R., 2019. Taxonomic distance as a tool for finding correlation between soil taxonomy and world reference base classification system in calcareous, gypsiferous and saline soils. Almaty, **Kazakhstan**.

Ghebleh Goydaragh, M., <u>Shahbazi, F.,</u> Neyshabouri, M.R., Jafarzadeh, A.A., and Lado, M., 2018. Can bilinear functions be used to estimate soil plasticity index? VIIICongress of sustainable use and management the soils. Valencia, **Spain**.

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Jafarzadeh, A.A., Rezaei, H., <u>Shahbazi., F.,</u> and Alijanpour, A., 2017. The role of forest type on soilevolution and revitalization in Arasbaran region. 9th International Congress of Environmental Research, Gwalior, **India**.

Khamseh, A., <u>Shahbazi, F.,</u> Oustan, S., Najafi, N. and Davatgar, N. 2016. Impactof tailings dam failure on spatial features of copper contamination (Mazraeh mine area, Iran). International Conference on Integrated Environmental Management for Sustainable Development, Sousse, **Tunisia**.

Jafarzadeh, A.A., Rezaei, H., Alijanpour, A., <u>Shahbazi., F.,</u> and Valizadeh Kamran, K., 2016. Soil organic matter evolution under natural environmental condition in Arasbaran forests. International Conference on Integrated Environmental Management for Sustainable Development, Sousse, **Tunisia**.

<u>Shahbazi, F.,</u> Sahabnaghdi, I., Neyshabouri, M.R., and Oustan, S., 2015. Assessing leaching of saline-sodic soils affected by Kaveh-Soda factory effluent using georefrenced maps in Maragheh-Bonab plain. SAFE, Ho Chi Minh, **Vietnam**.

<u>Shahbazi, F.,</u> Aliasgharzad, N., Ebrahimzad, S.A., and Najafi, N., 2011. Applying ArcGIS Geostatistical Analyst for zoning of some soil biological properties affected by different land uses. Montpellier, **France**.

<u>Shahbazi, F.,</u> and Jafarzadeh, A.A., 2010. Land management planning concerning to workability timing of soil in Souma area, using Aljarafe model. 19th World Congress of Soil Science, Brisbane, **Australia**.

<u>Shahbazi, F.,</u> Jafarzadeh, A.A., De la Rosa, D., and Anaya-Romero, M., 2010. Soil erosion assessment and monitoring by using ImpelERO model in east Azerbaijan province, Iran. 19th World Congress of Soil Science, Brisbane, **Australia**.

<u>Shahbazi, F.,</u> Jafarzadeh, A.A., and Shahbazi, M.R., 2009. Agro-ecological field vulnerability evaluation and climate change impacts in Souma area (Iran), using MicroLEIS DSS. Biohydrology, Bratislava, **Slovakia**.

Jafarzadeh, A.A., **Shahbazi, F.,** and Shahbazi, M.R., 2009. Suitability evaluation of some specific crops in Souma area (Iran), using Cervatana and Almagra models. Biohydrology, Bratislava, **Slovakia**.

<u>Shahbazi, F.,</u> and De la Rosa, D., 2009. Evaluating soil contamination risk impact on land vulnerability and climate change in east Azerbaijan, Iran. EGU, **Austria**.

<u>Shahbazi</u>, <u>F.</u>, Jafarzadeh, A.A., and Shahbazi, M.R., 2009. Assessing sustainable agriculture development using the MicroLEIS DSS in Souma area, Iran. Egmondaan Zee, the Netherlands.

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Shahbazi, F., Jafarzadeh, A.A., Sarmadian, F., Neyshabouri, M.R., Oustan, S., Anaya-Romero, M., Lojo, M., and De la Rosa, D., 2008. Land capability evaluation and climate change impacts in semi-arid and Mediterranean areas using Microleis DSS. Huelva, **Spain**.

Shahbazi, F., Jafarzadeh, A.A., Sarmadian,F., Neyshabouri, M.R., and Oustan, S., 2007. Parent material and land use effects on population frequency distribution parameters of selected soil variables in south part of Ahar region. Pedometrics, Tubingen, **Germany**.

>60 papers were presented at National Congress so far.

Associate Prof. Dr. FarzinShahbazi

Thalbogi

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