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Siroos Jafari

Education

B.Sc. (Soil Sciences)	1991-1995	Shiraz university (Iran)
M.Sc. (Soil Sciences)	1998-2000	Chamran university of Ahwaz (Iran)
Ph.D (Pedology)	2001-2005	Shiraz University (Iran) and Guelph (Canada)

M.Sc. Thesis Title: Effect of heating on fixation of pollutant elements by clay minerals

Ph.D. Thesis Title: Effect of cultivation on changes of soil properties, clay minerals, potassium release and fixation in soil profiles under sugarcane, rotate cultivation and non-cultivated soil in Khuzestan province.

Appointments

2005-Present. Agricultural Sciences and Natural Resources University of Khuzestan, soil science department.

2005–2008. Senior Researcher, Soil and water department, Sugarcane research center, Ahwaz Iran.

2005–2007. Research Manager, Soil and water department, Sugarcane research center, Ahwaz Iran.

2002- 2010. Senior Consulting. Sazabpardazan consult engineering Co., Ahwaz, Iran.

2002- 2010. Senior Consulting. Dezab consult engineering Co., Ahwaz, Iran

Publications

Journal Papers

1. Chorom, M., and S. Jafari. 2003. Cobalt and cadmium fixation by soil clays as affected by thermal energy. Journal of Science and Technology of Agriculture and Natural Resources, Vol. 7, No. 2. (In Persian with English abstract).
2. Jafari, S., M. Baghernejad and M. Chorom. 2005. Evaluation of changes in physico-chemical properties in cultivated (under sugarcane and rotation cropping) and non-cultivated soils in Haft-Tappeh (Iran). (In Persian with English abstract).
3. Jafari, S., M. Baghernejad. 2008. Evaluation of potassium fixation by soils and clays of lands under different cropping systems. Vol. 11, No. 41(A). P. 75-89. (In Persian with English abstract).
4. Naseri, A. A., S. Jafari and M. Alimohammdi. 2007. Soil compaction due to sugarcane harvesting and the effects of subsoiling on improvement of the soil physical conditions. Journal of Applied Sciences. 7(23): 3639 – 3648.
5. Albaji, M., S. Boroomand Nasab, H.A. Kashkoli, A.A. Naseri, G. sayyad and S. Jafari. 2008. Comparison of different irrigation methods based on the parametric valuation approach in North Mollasani, Iran. Journal of Agronomy. 7 (2): 187-191.
6. Shane Dashtgol, A., S. Jafari and N. Bani-Abbasi. 2008. Effect of Every other Furrow Irrigation on Yield of Sugarcane in South Ahwaz Sugarcane Fields. Iranian Journal of Agriculture Science, 2-38(2), Iran. (In Persian with English abstract).
7. Koochekzadeh, A., G. Fathi, M.H. Gharineh, S.A. Siadat, S. Jafari and Kh. Alami-Saeid. 2009. Impacts of rate and split application of N fertilizer on sugarcane quality. International Journal of Agricultural Research. 4 (3): 116-123.
8. Chorom, M., M. Baghernejad and S. Jafari. 2009. Influence of sugarcane production and rotation cropping on the clay mineral assemblage. Applied clay science. 46: 385-395.
9. Albaji, M., S. Boroomand-Nasab, A.A. Naseri and S. Jafari. 2009. Comparison of Different Irrigation Methods Based on the Parametric Evaluation Approach in Abbas Plain—Iran. Journal of Irrigation and Drainage Engineering. Vol. 136, No. 2, 131–136.

10. Amerikha, H., M. Chorom., A. Landi and S. Jafari. 2010. Application of DNDC model for estimating carbon dioxide emissions under land use change in southern Ahvaz. *Agricultural Engineering Journal of Agricultural Science*, (1) 33, p. 1-14 (In Persian with English abstract).
11. Owliaie. H.R., E. Adhami., S. Jafari, M. Rajaie and R. Ghaseme Phasaie. 2010. Distribution of magnetic susceptibility in relation to iron compounds in some selected soils of Fars province. *Journal of Soil and Water Sciences*. Volume 23 Number 2, p. 191-205. (In Persian with English abstract).
12. Nadian, H. B. Nateghzadeh, S. Jafari. 2012. Effects of salinity and nitrogen fertilizer on some quantity and quality parameters of sugarcane (*Saccharum sp.*). *International Journal of Food, Agriculture & Environment*. 10 (1): 470-474. (In Persian with English abstract).
13. Maadi, B. Gh. Fathi, A. Siadat, Kh. Alami Saeid and S. Jafari. 2012. Effect of preceding crop and nitrogen rates on grain yield and yield component of wheat. *Journal applied science*. 17(10): 1331-1336.
14. Maadi, B., Gh. Fathi, A. Syadat, Kh. Alemisaeid and S. Jafari. 2012. Effect of preceding crop and nitrogen rates on grain yield and yield component of wheat. *Journal applied science*. 17(10): 1331-1336.
15. Sharifipour, M., A.A. Naseri, S. Jafari, Sh. Veysi. 2012. Mathematical model to estimate drain water quality in saturated soils and its comparison with field experiments in south of Khuzestan. *Report and Opinion*, New York, USA. 4(12): 1-6.
16. Dayani, M. S. Jafari and B. Khalil Moghadam. 2013. Saline and sodic mapping using geostatistics theory (A case study in western Karoon River land of Khozestan). *Pajohesh and Sazandegi*. Vol. 94. P. 86-95. (In Persian with English abstract).
17. Ghorbani, Z., S. Jafari and B. Khalil Moghaddam. 2013. The effect of soil physicochemical properties under different land use on aggregate stability in some part of Khuzestan province. *J. of Soil Management and Sustainable Production*, Vol. 3(2), 2013 <http://ejsms.gau.ac.ir>. (In Persian with English abstract).
18. Sadeghi Lari, A., Moazed, H., Naseri, A., Liaghat, A., Jafari, S. 2013. Flow and Nitrate Losses Reduction using Controlled Drainage in the Arid and Semi-Arid Areas of Iran. *Irrigation Sciences and Engineering*, 36(3), 109-118. (In Persian with English abstract).
19. Moradi F., B. Khalili Moghadam S. Jafari S. Ghorbani Dashtaki. 2014. Long-term effects of mechanized cultivation on some soil physical properties in some Khozestan sugarcane Agro-Industries. *Journal of Water and Soil* Vol. 27, No. 6, Jan.-Feb. p. 1153-1165. (In Persian with English abstract).
20. Mahjoubi, A., Hooshmand, A., Naseri, A., Jafari, S. 2014. Effect of Controlled Drainage on Reducing Drainage Coefficient and Drainage Volume in Sugarcane Fields of Imam Khomeini Agro- industry. *Water and Soil*, 27(6), 1133-1144. doi: 10.22067/jsw.v0i0.33145. . (In Persian with extend English abstract).
21. Moradi, F., B. Khalili Moghadam, S. Jafari and Sh. Ghorbani Dashtaki. 2014. Aggregates Stability Evaluation Indices and The Most Effective Soil Characteristics: Case Study in Sugarcane Agro-Industry of Khozestan. *Watershed Management Research Journal*, 27(4), 43-53. doi: 10.22092/wmej.2015.106913. . (In Persian with English abstract).
22. Moradi, F., B. Khalili Moghadam, S. Jafari and Sh. Ghorbani Dashtaki. 2014. Evaluating some penetration resistance models in some Khozestan sugarcane agro-industries. *J. of Soil Management and Sustainable Production*, Vol. 4(2), 2014 <http://ejsms.gau.ac.ir>. (In Persian with English abstract).
23. Jafari S, Nadian H. 2014. The Study of a Toposequence Soil Series and Clay Mineral Assemblage in some Soils of Khozestan Province. *JWSS*. 2014; 18 (69) :151-164. URL: <http://jstnar.iut.ac.ir/article-1-2870-fa.html>. (In Persian with English abstract).
24. Pishgir M, Jafari S. 2014. Comparison Between Potassium and Ammonium Fixation by Clays in Different Agriculture Systems. *JWSS*. 2014; 18 (69) :237-250. URL: <http://jstnar.iut.ac.ir/article-1-2877-fa.html>. (In Persian with English abstract).
25. Jamshidsafa, M., Khalili Moghadam, B., Jafari, S., Ghorbani, S. 2015. Feasibility investigation of filter cake using in mulch production for sand dune stabilization in Ahvaz. *Journal of Agricultural Engineering Soil Science and Agricultural Mechanization, (Scientific Journal of Agriculture)*, 38(1), 29-42. doi: 10.22055/agen.2015.11273. (In Persian with English abstract).
26. Ramezani, F., Jafari, S., Salavati, A., Khalili Moghaddam, B. 2016. Study the Soil Quality Changes Indicators Using Nemoro and Integrated Quality Index Models in Some Khuzestan's Soils. *Water and Soil*, 29(6), 1629-1639. doi: 10.22067/jsw.v29i6.35514. (In Persian with English abstract).
27. Jafari S., A. Golchin and A Toolabifard. 2016. Effect of land use changes on physical fractionation properties of organic matter, clay dispersion and aggregate stability in some Khuzestan soils province. Volume 47, Issue 3, November and December, Pages 593-603. 10.22059/IJSWR.2016.59329. (In Persian with English abstract).

28. Jafari, S., Bandeh-Elahi, F., Khalili Moghadam, B. 2016. The study of clay and soil development that effected by drainage and land use on the Karoon River. Iranian Journal of Soil and Water Research, 47(1), 1-12. doi: 10.22059/ijswr.2016.57973. (In Persian with English abstract).
29. Jafari, S. and Peshgir, M. 2016. Study of Factors Influencing Potassium and Ammonium Fixation in the Soil, Clay Minerals and its Roles in Potassium Fertilizer Consumption. Land Management Journal, 3.2(2), 121-139. doi: 10.22092/lmj.2016.106148. (In Persian with English abstract).
30. Pajohannia, M., Chorom, M., Jafari, S. 2016. The Effect of Water Table Fluctuation and its Salinity on Fe Crystal and Noncrystal in some Khuzestan Soils. Water and Soil, 30(5), 1531-1542. doi: 10.22067/jsw.v0i0.35151.
31. Pishgir, M., Jafari, S., Ghanian, M. 2017. Application of Soil Magnetic Susceptibility for Monitoring Bioavailable Metals Pollution. Iranian Journal of Soil Research, 31(1), 131-142. doi: 10.22092/ijsr.2017.110355.
32. Abdoli Y, Jafari S. 2018. The Effect of Topography and Irrigation on Soil Development and Clay Mineral Diversity of Khuzestan's Gypsic Soils. JWSS. 2018; 22 (1) :387-403. URL: <http://jstnar.iut.ac.ir/article-1-3325-fa.html>.
33. Nourali, E., Nadian, H., Jafari, S., Heidari, M. (2018). Effects of salinity and cadmium on some growth factors and micronutrients uptake by coriander (*Coriandrum sativum* L.). Environmental Stresses in Crop Sciences, 11(3), 737-748. doi: 10.22077/escs.2018.875.1172 (In Persian with extended abstract).
34. Landi, A., S. Pourkeihan, M. Chorom, S. Hojati and S. Jafari. 2018. Study of mineralogical properties of sugarcane fields in comparison with uncultivated lands and fields under rotation cultivation in south of Khuzestan Province. www.ijcm.ir. Iranian journal of crystal and mineralogy. 26 (1) :19-30. URL: <http://ijcm.ir/article-1-1048-fa.html>. (In Persian with English abstract).
35. Landi, A., S. Pourkeihan, M. Chorom, S. Hojati and S. Jafari. 2018. Study of the effects of land use change and construction of sugarcane fields on physicochemical, mineralogical and micromorphological characteristics of soil in southern Khuzestan province. J. of Soil Management and Sustainable Production, Vol. 8(2), <http://ejsms.gau.ac.ir> DOI: 10.22069/ejsms.2017.10968.1639. (In Persian with extend English abstract).
36. Asgari, N. and S. Jafari. 2017. The study of particle size distribution of calcium carbonate and its effects on some soil properties in Khuzestan province. Agriculture research Journal. 36(2), 71-80.
37. Azoogh, L. B. Khalili Moghadam and S. Jafari. 2018. Interaction of petroleum mulching, vegetation restoration and dust fallout on the conditions of sand dunes in southwest of Iran. Aeolian Research. P. 124-132.
38. Jafari, S. 2019. Correlation Among K Forms with Soil Physical-Chemical Properties and Clay Mineral Diversity in Some Soils of Khuzestan. Iranian Journal of Soil and Water Research, 50(7), 1721-1733. doi: 10.22059/ijswr.2019.274818.668112. (In Persian with extend English abstract).
39. Habibian M, Jafari S, Sheklabadi M. 2019. Soil Fe Forms in Sugarcane Cultivations with Different Utilization Histories. JWSS. 23 (1) :149-164. URL: <http://jstnar.iut.ac.ir/article-1-3380-fa.html>.
40. Jafari, S., Bordbar, E., Ghanian, M. 2019. Comparison the results of three methods for measuring the amount of Water-Dispersible Clay in Khuzestan soils. Iranian Journal of Soil and Water Research, 50(1), 123-134. doi: 10.22059/ijswr.2018.246794.667803. (In Persian with extend English abstract).
41. Abdoli, Y., jafari, S., Beshkar, A. 2019. Correlation between Different Fe Forms and Magnetic Susceptibility with the Development of Some Ramhormoz's Soils, Khuzestan Province, Iran. Water and Soil, 32(6), 1149-1164. doi: 10.22067/jsw.v32i6.68206. (In Persian with extend English abstract).
42. Jafari, S. 2020. Effects of Dam Construction and the Karoon River's Change of Hydrology Regime on Soil Salinity and Dust Storms of Khuzestan Plain. Irrigation Sciences and Engineering, 43(1), 157-172. doi: 10.22055/jise.2018.20709.1490. (In Persian with extend English abstract).
43. Parizipour, M.H. Gh., A. Rajabpour, S. Jafari and A. Tahmasebi. 2021. Salinity stress affected the fitness of bird cherry-oat aphid (*Rhopalosiphum padi* L.) and Barley yellow dwarf virus transmission efficiency to wheat. Arthropod-Plant Interactions. <https://doi.org/10.1007/s11829-020-09795-0>.
44. Hassanizade, S. and S. Jafari. 2021. Changes in physicochemical properties of old stabilized sand dunes due to atmospheric sediments and diversity of clay minerals in a dry area. Aeolian Research, 50. (2021) 100674.
45. Khodadadie Khamseioie, Z. and S. Jafari. 2021. The Effect of Deforestation on Physicochemical Characteristics of the Soil in Southern Zagross. Iran Journal Soil Water Resources. Vol. 51, No. 11. DOI: 10.22059/ijswr.2020.299912.668557. (In Persian with extend English abstract).
46. Jafari, S., M. Karimzadeh and A. Abdeslahi. 2021. Investigating Carbonate Distribution in Particle Size Components of Some Soils of Khuzestan Province. Journal of Water and Soil Science Vol. 25, No. 2, Summer 2021, Isfahan University of Technology, Isfahan, Iran. (In Persian with extend English abstract).

Selected Presentations

Paper Presentations

1. Jafari, S., A.A. Naseri, H. Nadian, and M. Elhamifard. 2003. Effect of vinas with irrigation water on soil chemical properties. Proceeding of the 8th Iranian congress of soil science. Rasht, Iran (in Persian).
2. Jafari, S., M. Baghernejad and R.J. Heck. 2006. Study of clay mineral transformation in the soils under different cultivations in Khuzestan province, Iran. 9th Iranian congress of soil science. Karaj, Iran. Pp. 351-353 (in Persian).
3. Jafari, S., M. Baghernejad and R.J. Heck. 2006. Comparison of structure and porosity in some cultivated soil with no cultivated by Axial X-Ray tomography. 9th Iranian congress of soil science. Karaj, Iran. Pp.223-224 (in Persian).
4. Jafari, S., and M. Chorom. 2003. Effect of heating on fixation of pollutant elements by clay minerals. 7th ICOBTE. Uppsala, Sweden.
5. Naseri, A.A. and S. Jafari. 2003. Growth and Water Use of Sugarcane under Controlled Water table Management and Saline Conditions. 9th International Drainage Workshop. Utrecht, Netherlands.
6. Jafari, S., M. Baghernejad, R. J. Heck. 2009. Influence of sugarcane production and rotation cropping on the clay mineral assemblage. XIV International Clay Conference. Castellaneta Marina, Italy. June 14-20.
7. Jafari S. and M. Baghernejad. 2009. Effects of wetting and drying, and clay mineral proportions on potassium fixation in some cultivated and uncultivated soils, Iran. XIV International Clay Conference. Castellaneta Marina, Italy. June 14-20.
8. Jafari S. 2010. Study of palygorskite transformation under long term cultivation and irrigation in an arid region (Khuzestan, Iran). SEA-CSSJ-CMS Trilateral meeting on clays. Barcelona, Spain.
9. Jafari S., Z. Iranshahi, Gh. Fathi, A. Syadat and A. Abdali Mashhadi. 2011. Effect of Cadmium and Zinc Levels on Yield and Nutrient Uptake in Wheat. 11th ICOBTE, Florence, Italy.
10. Nadian H. and S. Jafari. 2011. Phosphorus inflow to mycorrhizal and non-mycorrhizal plants of Trifolium Alexandrinum as affected by soil compaction. ATINER, ISBN: 978-960-6672-99-6, 260 pages.
11. Nadian, H., B. Nateghzadeh, S. Jafari, H. Hamdi, M. Parvizi. 2011. Interactive effects of salinity and nitrogen on plant growth, sodium and potassium uptake by sugarcane (commercial variety CP69-1062). 4th IAPSIT (international sugar conference sustainable technologies and marketing strategies), India, New Delhi.
12. Moradi, F. B. Khalil moghadam, S. Jafari and S. Ghorbani Dashtaki. 2012. Optimization of pedotransfer functions using a neuro-fuzzy network in sugarcane agro-Industry of Iran. 8th International Soil Science Congress. Cesme, Izmir, Turkey.
13. Moradi, F. B. Khalilmoghadam, S. Jafari and S. Ghorbani dashtaki. 2012. Estimating soil water retention curve in sugarcane agro-industry of Iran by adaptive neuro-fuzzy inference system. 8th International Soil Science Congress. Cesme, Izmir, Turkey.
14. Hajishah, M., A. Liaghat and S. Jafari. 2012. Monitoring and management of drainage water in downward land of Dez and Karkheh dams Khuzestan province Iran. International Symposium on dams for a changing world. Kyoto, Japan.
15. Jafari, S., A. Naderi, and M. A. Delavar. 2013. Clay mineral assemblage in Quaternary deposits among different geological zone, metamorphic and calcareous. Rio de Janeiro, Brazil.
16. Pishgir M. and S. Jafari. 2013. Comparison between K and NH₄ fixation by clay minerals in different land uses. Rio de Janeiro, Brazil.
17. Jafari, Siroos, Jamil Mohammadian Dehgolan, Nafiseh Rangzan, and Mansor ghanian. 2017. Effect of different soils and clay minerals (Bentonite, Garnet) on adsorption of lead, cadmium and nickel from contaminated water. 17th International Clay Conference, Granada, Spain.
18. Jafari, Siroos and Yones Abdoli. 2017. Effect of parent material and irrigation on sepiolite and palygorskite distribution in some gypsiferous soils of Khuzestan province, Iran. 17th International Clay Conference, Granada, Spain.
19. Somaye Hassanizade, Siroos Jafari, and Bijan Khalili Moghadam. 2018. Evolution the clay minerals in stabilized sand dunes affected by dust storm in arid regions, Iran. 22th Meeting of international mineralogy (IMA), Australia.
20. Siroos Jafari. 2017. Effect of tide on clay mineral diversity of khuzestan flood plain, Iran. International clay conference, Granada, Spain. 17-21 July.
21. Siroos Jafari, Jamil Mohammadian Dehgolan, Nafiseh Rangzan, and Mansor ghanian. 2017. Effect of different soils and clay minerals (Bentonite, Garnet) on adsorption of lead, cadmium and nickel from contaminated water. International clay conference, Granada, Spain. 17-21 July.

22. Siroos Jafari and Younes Abdoli. 2017. Effect of parent material and irrigation on sepiolite and palygorskite distribution in some gypsiferous soils of Khuzestan province, Iran. International clay conference, Granada, Spain. 17-21 July.
23. Siroos Jafari, Xuiming Liu and Somaye Hassanizade. Introduction and mineralogy of loess sediments in a part of Mianroodan (Khuzestan province). 2020. Iranian crystal and mineralogy congress. Birjand, Iran.

Teaching

Teaching Experience

2005–Present. Soil genesis and classification. Soil science Dep., Agricultural Sciences and Natural Resources University of Khuzestan, Iran (For B.Sc. and M.Sc.).

2008–Present. Clay mineralogy. Soil science Dep., Agricultural Sciences and Natural Resources University of Khuzestan, Iran. (For Ph.D. and M.Sc.)

2007–Present. Soil mapping. Soil science Dep., Agricultural Sciences and Natural Resources University of Khuzestan, Iran.

2006–Present. Land evaluation and Land suitability. Soil science Dep., Agricultural Sciences and Natural Resources University of Khuzestan, Iran. (For B.Sc. and M.Sc.)

Technical Publications

Jafari S. and M. Chorom. 1998. Preparation of clay minerals for XRD analysis. (In Persian). Chamran University, Ahwaz, Iran.

Award

2010, Top researcher, Agricultural sciences and natural resources university of Khuzestan.