

Curriculum Vitae

Dr. M.R. Mosaddeghi



Personal Information:

Name: Mohammad Reza Mosaddeghi

Marital status: Married

Nationality: Iranian

Age: 37

Place and Date of Birth: Golpaygan, Isfahan, Iran, March 1974

Contact Address:

Department of Soil Science, College of Agriculture, Isfahan University of Technology, Isfahan 84156-83111, Iran

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Education and Academic Biography:

PhD in Soil Physics, 2003, Isfahan Univ. Technol., Isfahan, Iran

Title of PhD Thesis:

Pre-compaction Stress and Its Relationships with Some Physical and Mechanical Properties of Selected Soils in Isfahan

A period of 9 months (2002) on sabbatical leave in **Soil Technology Group of Wageningen University, The Netherlands** working under supervision of Prof. A.J. Koolen

MSc in Soil Physics, 1997, Isfahan Univ. Technol., Isfahan, Iran

Title of MSc. Thesis:

Soil Compactibility as Affected by Soil Moisture Content and Farmyard Manure: Field and Lab Studies

BS in Soil Science, 1995, Isfahan Univ. Technol., Isfahan, Iran

Research Interests:

Soil Physics, Soil Compaction, Agricultural Soil Mechanics, Soil Tillage, Solute and Pathogen Transport in Soil, Soil Physical Properties and Plant Growth, Scaling and Fractals in Soil Science

Positions Held:

- 1) Assoc. Prof., Soil Sci. Dept., College of Agric., Isfahan Univ. of Technol., 2010 to present
- 2) Assoc. Prof., Soil Sci. Dept., College of Agric., Bu-Ali Sina Univ., 2008 to 2010
- 3) Assist. Prof., Soil Sci. Dept., College of Agric., Bu-Ali Sina Univ., 2003 to 2008
- 4) Head of Office for Excellent Students, Bu-Ali Sina Univ., April 2004 to April 2007
- 5) Head of Soil Sci. Dept., Bu-Ali Sina Univ., January 2006 to 2009

Computer Experience:

Familiar with RETC, ROSETTA, SOILPAR, STANMOD, MACRO, HYDRUS, SOCOMO, COMPMOD, COMPACT, PLAXIS packages

Courses Taught:

Undergraduate: Soil Physics; Soil-Water and Plant Relations; Soil Mechanics; Agricultural Soil Physics and Mechanics; General Soil Science

Graduate (MSc. and PhD): Advanced Soil Physics; Advanced Soil-Water and Plant Relations; Applications of Mathematical Models in Soil Physics; Agricultural Soil Mechanics; Advanced Concepts in Soil Physics and Conservation

Academic Experience:

2010 Supervisor to 3 MSc. students

2009 Supervisor to 2 MSc. students

2009 Advisor to 4 MSc. students

2008 Supervisor to 3 MSc. students

2008 Advisor to 3 MSc. students

2007 (continued) Supervisor to 1 PhD student

2007 (continued) Advisor to 1 PhD student

2007 Leader of research projects in BASU and from Iran National Science Foundation (INSF)

2007 Supervisor to 3 MSc. students

2007 Advisor to 5 MSc. students

2006 Supervisor to 3 MSc. students

2006 Advisor to 3 MSc. students

2005 Consultant to research projects

2005 Co-supervisor to 2 MSc. students

2003 Advisor to 2 MSc. students

References:

1) Dr. M.A. Hajabbasi

Department of Soil Science, College of Agriculture, Isfahan University of Technology, Isfahan 84154, IRAN, e-mail: hajabbas@cc.iut.ac.ir

2) Prof. A. Hemmat

Department of Agricultural Machinery Engineering, College of Agriculture, Isfahan University of Technology, Isfahan 84154, IRAN, e-mail: ahemmat@cc.iut.ac.ir

3) Prof. A.A. Mahboubi

Department of Soil Science, College of Agriculture, Bu-Ali Sina University, Hamadan 65174, Iran, e-mail: mahboubi2000@yahoo.com

4) Prof. A.J. Koolen

Soil Technology Group, Wageningen University, Technotron, Bornsesteeg 59, 6708 PD Wageningen, The Netherlands, e-mail: jos.koolen@wur.nl

5) Dr. T. Keller

Department of Soil Sciences, Swedish University of Agricultural Sciences, P.O. Box 7014, SE 750 07 Uppsala, Sweden, e-mail: thomas.keller@mv.slu.se

6) Dr. A. Unc

Plant and Environmental Sciences, New Mexico State University, Box 30003 MSC 3Q, Skeen Hall Room N336, Las Cruces, NM 88003-8003, USA, e-mail: aunc@nmsu.edu

7) Prof. A.R. Dexter

Institute of Soil Science and Plant Cultivation (IUNG), ul. Czartoryskich 8, 24-100 Pulawy, Poland, e-mail: tdexter2@iung.pulawy.pl

8) Dr. A. Alexandrou

Department of Plant Science, California State University, Fresno 2415 E. San Ramon MS AS72 Fresno, CA 93740, USA, e-mail: aalexandrou@csufresno.edu

Awards:

- 1) First Class Student of BSc.
- 2) First Order of MSc Entrance Examination
- 3) Receipt Honor Scholarship of “Top Student in College of Agric.” from Graduate Students’ Center of Isfahan Univ. Technol.
- 4) First Class Student of MSc
- 5) First Order of PhD Entrance Exam
- 6) Award of 3rd Order in Agricultural Section of 3rd Khwarazmi Youth Festival, Tehran, 2001
- 7) Award of Brilliant Student of Isfahan Univ. Technol. in University Year 2001-2002
- 8) Award of Brilliant Scholarship Student of MSRT
- 9) Award of 2nd Order in Agricultural Section of 5th Khwarazmi Youth Festival, Tehran, 2003
- 10) Award of Brilliant Student of Isfahan Univ. Technol. in University Year 2002-2003
- 11) First Researcher of Soil Sci. Dept., Bu-Ali Sina Univ., Year 2005
- 12) First Teacher of Soil Sci. Dept., Bu-Ali Sina Univ., Year 2005
- 13) First Researcher of Soil Sci. Dept., Bu-Ali Sina Univ., Year 2007
- 14) First Teacher of Soil Sci. Dept., Bu-Ali Sina Univ., Year 2008
- 15) First Researcher of Soil Sci. Dept., Bu-Ali Sina Univ., Year 2008

Memberships:

International Soil and Tillage Organization (ISTRO)
Secretary of ISTRO-Iranian Branch

National and International Activities:

Referee of National Journals:

Journal of Agricultural and Natural Resource Sciences and Technology (Isfahan)
Soil and Water Journal (Tehran)
Agricultural Knowledge Journal (Tabriz)
Journal of New Agricultural Technologies (Zanjan)
Agricultural Research (Water, Soil & Plant in Agriculture) (Hamadan)

Referee of International Journals:

Geoderma (Elsevier Science)
Soil & Tillage Research (Elsevier Science)
Agriculture, Ecosystems & Environment (Elsevier Science)
Biosystems Engineering (Elsevier Science)
Australian Journal of Soil Research (CSIRO Publishing)
Acta Agriculturae: Soil and Plant (Taylor and Francis)

Scientific Communication/Cooperation with Soil Scientists around the World:

Prof. A.J. Koolen (Wageningen University, The Netherlands)

Prof. A.R. Dexter (IUNG, Poland)
Prof. R. Schulin (ETH, Switzerland)
Prof. L.M. Arya (USA)
Prof. M.B. Kirkham (KSU, USA)
Prof. L.F. DeBano (ASU, USA)
Dr. P. Lerink (Netagco Potato Division, The Netherlands)
Dr. A. Alexandrou (OSU, USA)
Dr. T. Keller (Swedish University of Agricultural Sciences, Uppsala, Sweden)
Dr. A. Unc (NMSU, USA)
Dr. P.D. Hallett (SAC, Scotland)

Language: Persian (mother tongue), English

MSc. Thesis Supervisor:

Zandsalimi, S.; Rostami, K.; Khatar, M.; Khazaei, A.; Zarrin, M.R.; Morshedizad, M.; Aelamanesh, P.; Farhangi, M.B.; E. Farahani; H. Hassanipour

MSc. Thesis Advisor:

Bayat, H.; Safadoust, A.; Tahmasebi, M.; Samaei, M.R.; Nosrati, A.; Amiri, E.; Nikpour, M.; Doaei, N.; Sahraei, N.; Risebandi, E.; Mokari, M.; Moshtaghi, M.; Rezaei, T.; G. Yousefi; P. Feizi; M. Farrokhnia

Research Potentials:

- 1) Pedotransfer Functions (PTFs) for Predicting Hydraulic Properties of Soils
- 2) Soil Friability, Fragmentation and Workability
- 3) Fracture Mechanics in Tillage and Crumbling of Agricultural Unsaturated Soils
- 4) Solute and Pathogen Transport in Porous Media and Modeling
- 5) A Systematic Approach to Hardsetting in Soils
- 6) Modeling Soil Tillage/Compaction Using FEM e.g. PLAXIS
- 7) Stress-Strain Processes in Unsaturated Agricultural Soils
- 8) PTFs for Predicting Bearing Capacity and Pre-compression Stress of Soils
- 9) Application of Plate Sinkage Test (PST) for In Situ Monitoring of Soil Strength
- 10) Non-Limiting Water Range (NLWR) and Least Limiting Water Range (LLWR)
- 11) Modeling Soil Physical and Mechanical Properties Effects on Root Growth
- 12) Scaling and Fractals in Soil Science
- 13) Soil Water Repellency
- 14) Soil Organic Matter Fractionation and Carbon Sequestration

Publications:

One Translated Book, One Book-Chapter, 11 ISI Papers, 15 Persian Peer-Reviewed Journals, 40 International Conference Papers, 29 National Conference Papers

Book:

Hemmat, A., and **M.R. Mosaddeghi**. 2002. Translation to Persian of Following Bulletin of FAO:

Godwin, R.J. 1990. Agricultural Engineering in Development: Tillage for Crop Production in Areas of Low Rainfall. FAO Agricultural Services, Bulletin No. 83. PP. 120.

Published by Agricultural Research, Education and Extension Organization of Ministry of Jihad-e-Agriculture. No. 30. ISBN: 964-6667-14-7. 162 pp.

Book Chapter:

Safadoust, A., **M.R. Mosaddeghi**, and A.A. Mahboubi. 2006. Tensile Strength of Air-Dry Soil Aggregates as Influenced by Short-Term Management Practices in Western Iran. *In: Horn, R., H. Fleige, S. Peth and X. Peng (Eds.), Soil Management for Sustainability. CATENA VELAG ISBN 3-923381-52-2, 35447 Reiskirchen. pp. 424–433.*

Papers in Peer-Reviewed Journals:

ISI Journals:

- 1) **Mosaddeghi, M.R.** M.A. Hajabbasi, A. Hemmat and M. Afyuni. 2000. Soil compactibility as affected by soil moisture content and farmyard manure in central Iran. *Soil & Tillage Research. 55 (1-2): 87–97.*
- 2) **Mosaddeghi, M.R.**, A. Hemmat, M.A. Hajabbasi, and A. Alexandrou. 2003. Pre-compression stress and its relationship with physical and mechanical properties of a structurally unstable soil in central Iran. *Soil & Tillage Research. 70 (1): 53–64.*
- 3) **Mosaddeghi, M.R.**, M.A. Hajabbasi, and H. Khademi. 2006. Tensile strength of sand, playgorskite and calcium carbonate mixtures and interpretation with the effective stress theory. *Geoderma. 134 (1-2): 160–170.*
- 4) **Mosaddeghi, M.R.**, A. Hemmat, M.A. Hajabbasi, M. Vafaeian, and A. Alexandrou. 2006. Plate sinkage versus confined compression tests for in situ soil compressibility studies. *Biosystems Engineering. 93 (3): 325–334.*
- 5) **Mosaddeghi, M.R.**, A.J., Koolen, A. Hemmat, M.A. Hajabbasi, and P. Lerink. 2007. Comparisons of different procedures of pre-compaction stress determination on weakly structured soils. *Journal of Terramechanics. 44 (1): 53–63.*
- 6) **Mosaddeghi, M.R.**, A.J., Koolen, M.A. Hajabbasi, A. Hemmat, and T. Keller. 2007. Suitability of pre-compression stress as the real critical stress of unsaturated agricultural soils. *Biosystems Engineering. 98: 90–101.*
- 7) Mahboubi, A.A, **M.R. Mosaddeghi**, and A. Safadoust. 2007. Corn root morphological attributes as influenced by soil management in a coarse-textured soil. *Archives of Agronomy and Soil Science. 53(4): 423–434.*
- 8) Bayat, H., M.R. Neyshabouri, M.A. Hajabbasi, A.A. Mahboubi, and **M.R. Mosaddeghi**. 2008. Comparing neural networks, linear and nonlinear regression techniques to model penetration resistance. *Turkish Journal of Agricultural Forestry. 32: 1-9.*
- 9) **Mosaddeghi, M.R.**, A.A. Mahboubi, S. Zandsalimi, and A. Unc. 2009. Influence of organic waste type and soil structure on the bacterial filtration rates in unsaturated intact soil columns. *Journal of Environmental Management. 90: 730-739.*

- 10) **Mosaddeghi, M.R.**, A.A. Mahboubi, and A. Safadoust. 2009. Short-term effects of tillage and manure on some soil physical properties and maize root growth in a sandy loam soil in western Iran. *Soil & Tillage Research (CIGR-2004 Special Issue)*. 104(1): 173-179.
- 11) Hemmat, A., M. Tahmasebi, M. Vafaeian, and **M.R. Mosaddeghi**. 2009. Relationship between pre-compaction stress and shear strength under confined and semi-confined loadings for a sandy loam soil. *Biosystems Engineering*. 102(2): 219-226.
- 12) **Mosaddeghi, M.R.**, M. Morshedizad, A.A. Mahboubi, A.R. Dexter, and R. Schulin. 2009. Laboratory evaluation of a model for soil crumbling for prediction of the optimum soil water content for tillage. *Soil & Tillage Research*. 105: 242–250.
- 13) **Mosaddeghi, M.R.**, A.A. Safari Sinegani, **M.B. Farhangi**, A.A. Mahboubi, and A. Unc. 2010. Saturated and unsaturated transport of cow manure-borne *Escherichia coli* through in situ clay loam lysimeters. *Agriculture, Ecosystems and Environment*. 137: 163–171.
- 14) Asgarzadeh, H., **M.R. Mosaddeghi**, A.A. Mahboubi, A. Nosrati, and A.R. Dexter. 2010. Soil water availability for plants as quantified by conventional available water, least limiting water range and integral water capacity. *Plant and Soil*. 335(1-2): 229–244.
- 15) Shirani, H., E. Rizabandi, **M.R. Mosaddeghi**, and H. Dashti. 2010. Impact of pistachio residues on compactibility, and permeability for water and air of two rridic soils from southeast of Iran. *Arid Land Research and Management*. 24(4): 365–384.
- 16) **Mosaddeghi, M.R.**, and A.A. Mahboubi. 2011. Point pedotransfer functions for prediction of water retention of selected soil series in a semi-arid region, western Iran. *Archives of Agronomy and Soil Science*. 57(4): 327–342.
- 17) Asgarzadeh, H., **M.R. Mosaddeghi**, A.A. Mahboubi, A. Nosrati, and A.R. Dexter. 2011. Integral energy of conventional available water, least limiting water range and integral water capacity for better characterization of water availability and soil physical quality. *Geoderma*. 166: 34–42.
- 18) Safadoust A., A.A. Mahboubi, B. Gharabaghi, **M.R. Mosaddeghi**, P. Voroney, A. Unc, and Gh. Sayyad. 2011. Bacterial filtration rates in repacked and weathered soil columns. *Geoderma*. 167/168: 204–213.
- 19) Ayoubi, S., P. Mokhtari Karchegani, **M.R. Mosaddeghi**, and N. Honarjoo. 2012. Soil organic carbon pools in particle-size fractions as affected by slope gradient and land use change in hilly regions, western Iran. *Journal of Mountain Science*. 9: 87–95.
- 20) Ayoubi, S., P. Mokhtari Karchegani, and **M.R. Mosaddeghi**. 2012. Soil aggregation and organic carbon as affected by topography and land use change in western Iran. *Soil & Tillage Research*. 121: 18–26.
- 21) Safadoust A., A.A. Mahboubi, **M.R. Mosaddeghi**, B. Gharabaghi, A. Unc, P. Voroney, and A. Heydari. 2012. Effect of regenerated soil structure on unsaturated transport of *Escherichia coli* and bromide. *Journal of Hydrology*. 430/431: 80– 90.

22) Safadoust A., A.A. Mahboubi, **M.R. Mosaddeghi**, B. Gharabaghi, A. Unc, and P. Voroney. Significance of physical weathering of two-texturally different soils for the saturated transport of *E. coli* and bromide. *Journal of Environmental Management* (accepted).

Persian Journals:

1) **Mosaddeghi, M.R.** M.A. Hajabbasi, A. Hemmat and M. Afyuni. 2000. Compactibility of Lavark soil as affected by soil moisture content and farm yard manure. *Journal of Agricultural and Natural Resource Sciences and Technology of IUT*. 3(4): 27-40 (in Persian with English summary).

2) Afyuni, M., and **M.R. Mosaddeghi**. 2001. Impact of tillage systems on soil physical properties and bromide leaching. *Journal of Agricultural and Natural Resource Sciences and Technology of IUT*. 5 (2): 39-53 (in Persian with English summary).

3) **Mosaddeghi, M.R.**, A. Hemmat, and M.A. Hajabbasi. 2003. Changes in some physical and mechanical properties of a structurally unstable soil after flood irrigation. *Journal of Agricultural and Natural Resource Sciences and Technology of IUT*. 7(1): 91-106 (in Persian with English summary).

4) Safadoust, A., A.A. Mahboubi, **M.R. Mosaddeghi**, A. Norouzi, and Gh. Asadian. 2005. Short-term effects of tillage methods and manures on soil bulk density and cone index and corn root characteristics. *Agriculture Research Journal, Hamadan*. 5(1): 14-29 (in Persian with English summary).

5) Zandsalimi, S., **M.R. Mosaddeghi**, A.A. Mahboubi, M. Rashidian, and A.A. Safari Sinegani. 2006. Impact of organic manures on *Escherichia coli* concentration of intact soil columns effluent under steady unsaturated flow. *Agricultural Research (Water, Soil & Plant in Agriculture)*. 6(3): 47-59 (in Persian with English summary).

6) Rostami, K., A.A. Mahboubi, **M.R. Mosaddeghi**, and A.A. Safari Sinegani. 2006. Lime and gypsum effects on *Pseudomonas fluorescens* transport through sand columns in saturated condition. *Agricultural Research (Water, Soil & Plant in Agriculture)*. 6(3): 61-73 (in Persian with English summary).

7) Zandsalimi, S., A.A. Mahboubi, **M.R. Mosaddeghi**, M. Rashidian, and M. Firozmanesh. 2006. Breakthrough curves of *Escherichia coli* released from organic manures as influenced by soil properties. *Water and Wastewater Journal, Isfahan*. 59: 63-74 (in Persian with English summary).

8) Safadoust, A., **M.R. Mosaddeghi**, A.A. Mahboubi, A. Nourozi, and Gh. Asadian. 2007. Short-term effects of tillage and manure on soil structural properties in Hamadan. *Journal of Agricultural and Natural Resource Sciences and Technology of IUT*. 11(41a): 91-101 (in Persian with English summary).

9) Bayat, H., A.A. Mahboubi, M.A. Hajabbasi, and **M.R. Mosaddeghi**. 2008. Combined effects of tillage systems and tractor types on some physical properties of a sandy loam in

Hamadan region: 1) in plant row. *Journal of Agricultural and Natural Resource Sciences and Technology of IUT*. 11(42b): 451-462 (in Persian with English summary).

10) Rostami, K., **M.R. Mosaddeghi**, A.A. Mahboubi, and A.A. Safari Sinegani. 2008. *Pseudomonas fluorescens* adsorption and filtration as affected by calcium sulfate and carbonate in sand columns under saturated condition. *Journal of Agricultural and Natural Resource Sciences and Technology of IUT*. 44: 97-109 (in Persian with English summary).

11) Rostami, K., A.A. Mahboubi, and **M.R. Mosaddeghi**. 2008. *Pseudomonas fluorescens* adsorption and filtration in sand columns as affected by calcium carbonate and calcium sulfate under unsaturated flow condition. *Water and Wastewater Journal, Isfahan*. accepted (in Persian with English summary).

12) Tahmasebi, M., A. Hemmat, M. Vafaeian, and **M.R. Mosaddeghi**. 2008. Determination of soil compaction strength (pre-compaction stress) with plate sinkage and uniaxial confined tests. *Journal of Agricultural and Natural Resource Sciences and Technology of IUT*. 44: 245-255 (in Persian with English summary).

13) Khazaei, A., **M.R. Mosaddeghi**, and A.A. Mahboubi. 2008. Test conditions, and soil organic matter, clay and calcium carbonate contents' impacts on mean weight diameter and tensile strength of aggregates from some Hamadan soils. *Journal of Agricultural and Natural Resource Sciences and Technology of IUT*. 44: 123-135 (in Persian with English summary).

14) Khazaei, A., **M.R. Mosaddeghi**, and A.A. Mahboubi. 2008. Wet structural stability and its relations with intrinsic properties of selected soil series in Hamadan Province. *Agricultural Research (Water, Soil & Plant in Agriculture)*. accepted (in Persian with English summary).

15) Zandsalimi, S., **M.R. Mosaddeghi**, A.A. Mahboubi. 2008. Fate of gram-negative bacteria released from different organic fertilizers in two Hamadan soils. *Journal of Agricultural and Natural Resource Sciences and Technology of IUT*. accepted (in Persian with English summary).

Conference Papers:

International Conferences:

1) Hajabbasi, M.A., and **M.R. Mosaddeghi**. 1998. Organic matter and water content effects on soil compactibility using Proctor test. *13th International Congress on Agricultural Engineering, Rabat, Morocco, 2-6 Feb. Vol. 1. Land and Water Use*. pp: 661-670.

2) Hajabbasi, M.A. and **M.R. Mosaddeghi**. 1998. Laboratory study of effectiveness of farmyard manure in reduction of compactibility of an arid soil in central Iran. *International Symposium on Arid Region Soils. Menemen, Izmir, Turkey*. pp: 754-760.

3) **Mosaddeghi, M.R.**, A.J. Koolen, M.A. Hajabbasi, and A. Hemmat. 2003. Pre-compression stress concept and physical qualities of soils from central Iran. *International Soil Tillage Research Organisation (ISTRO) 16th Triennial Conference, July 13-18, Brisbane, Australia*, pp: 761-766.

4) **Mosaddeghi, M.R.**, A.J., Koolen, A. Hemmat, and M.A. Hajabbasi. 2003. Effects of internal and external forces on pre-compaction stress and air permeability of five soils from

central Iran. *International Soil Tillage Research Organisation (ISTRO) 16th Triennial Conference, July 13-18, Brisbane, Australia*, pp: 767-773.

- 5) **Mosaddeghi, M.R.**, A.J., Koolen, A. Hemmat, M.A. Hajabbasi, and P. Lerink. 2003. Alternative methods of predicting pre-compression stress on soils with low structural stability. *9th European Conference of International Society for Terrain Vehicle Systems, September 8-11, Harper Adams University College, England*, pp: 327-337.
- 6) **Mosaddeghi, M.R.**, A. Hemmat, M.A. Hajabbasi, and A. Alexandrou. 2004. Using cone penetrometry profile to study soil deformation under plate sinkage test. *Proceedings of Annual International Meeting of ASAE/CSAE, August 1-4, Ottawa, Canada*, on CD-ROM.
- 7) **Mosaddeghi, M.R.**, M.A. Hajabbasi, A. Hemmat, and A. Alexandrou. 2004. Factors affecting stress-sinkage curve and pre-compaction stress determined by in situ plate sinkage test. *Proceedings of Annual International Meeting of ASAE/CSAE, August 1-4, Ottawa, Canada*, on CD-ROM.
- 8) Alexandrou, A., D. Stinner, and **M.R. Mosaddeghi**. 2004. A comparison of penetration resistance of transitional organic and conventional soils. *Proceedings of Annual International Meeting of ASAE/CSAE, August 1-4, Ottawa, Canada*, on CD-ROM.
- 9) Mahboubi, A.A., **M.R. Mosaddeghi**, and A. Safadoust. 2004. Root morphological characteristics as affected by manure and short-term tillage regimes. *Proceedings of Annual International Meeting of ASAE/CSAE, August 1-4, Ottawa, Canada*, on CD-ROM.
- 10) **Mosaddeghi, M.R.**, M.A. Hajabbasi, A. Hemmat, and A. Alexandrou. 2004. Determination of pre-compaction stress of in situ tractor pre-compacted soil by plate sinkage and confined compression tests. *Proceedings of 2004 CIGR International Conference, 11-14 October, Beijing, China*, on CD-ROM.
- 11) **Mosaddeghi, M.R.**, A.A. Mahboubi, and A. Safadoust. 2004. Corn root length density as affected by soil physical properties due to different manure and short-term tillage treatments. *Proceedings of 2004 CIGR International Conference, 11-14 October, Beijing, China*, on CD-ROM.
- 12) Alexandrou A., and **M.R. Mosaddeghi**. 2005. Predicting soil deformation under a sinking plate by a conceptual approach and cone penetrometer profile data. *Proceedings of the 2005 ASAE Annual International Meeting, July 17-20, Tampa, Florida, USA*, on CD-ROM.
- 13) Mahboubi, A.A., **M.R. Mosaddeghi**, and A. Safadoust. 2005. Temporary consequences of tillage and manure applications on soil pore characteristics and structural stability under corn crop in semi-arid region. *Proceedings of the 2005 ASAE Annual International Meeting, July 17-20, Tampa, Florida, USA*, on CD-ROM.
- 14) **Mosaddeghi, M.R.** 2005. Is soil compaction due to external stresses in central Iran? *International Conference on Human Impacts on Soil Quality Attributes in Arid and Semiarid Regions, September 12-16, Isfahan, Iran*, on CD-ROM.
- 15) **Mosaddeghi, M.R.**, M.A. Hajabbasi, and A. Hemmat. 2005. Water infiltration into soil as affected by soil water content, manure application and compaction combinations.

International Conference on Human Impacts on Soil Quality Attributes in Arid and Semiarid Regions, September 12-16, Isfahan, Iran, on CD-ROM.

16) Safadoust, A., A.A. Mahboubi, and **M.R. Mosaddeghi**. 2005. Soil hydraulic properties as affected by different management regimes. *International Conference on Human Impacts on Soil Quality Attributes in Arid and Semiarid Regions, September 12-16, Isfahan, Iran, on CD-ROM.*

17) Bayat, H., A.A. Mahboubi, M.A. Hajabbasi, M.R. Neyshabouri, and **M.R. Mosaddeghi**. 2005. A new approach to express saturated hydraulic conductivity using fuzzy sets. *International Conference on Human Impacts on Soil Quality Attributes in Arid and Semiarid Regions, September 12-16, Isfahan, Iran, on CD-ROM.*

18) Zandsalimi, S., **M.R. Mosaddeghi**, A.A. Mahboubi, and M. Rashidian. 2005. Transport of manure-borne bacteria including *Escherichia coli* through intact soil columns under unsaturated flow condition. *International Conference on Human Impacts on Soil Quality Attributes in Arid and Semiarid Regions, September 12-16, Isfahan, Iran, on CD-ROM.*

19) Rostami, K., A.A. Mahboubi, **M.R. Mosaddeghi**, and A.A. Safari Sinegani. 2005. *Pseudomonas fluorescens* transport in saturated sand and sand-gypsum mixtures. *International Conference on Human Impacts on Soil Quality Attributes in Arid and Semiarid Regions, September 12-16, Isfahan, Iran, on CD-ROM.*

20) **Mosaddeghi, M.R.**, A.A. Mahboubi, and A. Safadoust. 2005. Combined effects of manure and tillage regimes on hydraulic properties of a sandy loam soil in west Iran. *International Conference of Soil-Agriculture, Environment, Landscape, June 29-July 1 Brno Czech Republic, on CD-ROM.*

21) **Mosaddeghi, M.R.**, M.A. Hajabbasi, and H. Khademi. 2006. Impacts of playgorskite and calcium carbonate on the strength of their sand mixtures. *18th World Congress of Soil Science, July 9th-July 15th 2006, Philadelphia, Pennsylvania, USA.*

22) Safadoust, A., **M.R. Mosaddeghi**, and A.A. Mahboubi. 2006. Tensile strength of air-dry soil aggregates as influenced by management regimes in western Iran. *Proceedings of International Soil Tillage Research Organisation (ISTRO) 17th Triennial Conference, August 28th -Sept. 3rd 2006, Kiel, Germany, ISBN 3-9811134-0-3, pp. 1541-1548.*

23) Mahboubi, A.A., and **M.R. Mosaddeghi**. 2006. Influence of oil mulch and tillage during fallow period on soil moisture conservation in dryland farming. *Proceedings of International Soil Tillage Research Organisation (ISTRO) 17th Triennial Conference, August 28th -Sept. 3rd 2006, Kiel, Germany, ISBN 3-9811134-0-3, pp. 1413-1418.*

24) **Mosaddeghi, M.R.**, and A.A. Mahboubi. 2006. Impacts of shallow plowing on soil water conservation and agronomic traits of dryland wheat in western Iran. *Proceedings of International Soil Tillage Research Organisation (ISTRO) 17th Triennial Conference, August 28th -Sept. 3rd 2006, Kiel, Germany, ISBN 3-9811134-0-3, pp. 287-292.*

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