

ELSADIG AGABNA ELHADI

1. Personal information

Date and Place of birth : April 28th 1968; Sudan
Nationality : Sudanese
Gender : Male
Language : Arabic mother tongue, English (good), Moderate French and Japanese.
Address : University of Khartoum, Institute of Environmental Studies
P. O. Box : 321, post Code :11115
sad_agb@hotmail.com home pages:
https://scholar.google.com/citations?user=KmG_M4oAAAAJ&hl=en

2. Education:

- 1987-1993 University of Khartoum; Faculty of Agriculture B. Sc. (Honours, Class one) in Soil, 1993.
- 1995-1997, University of Khartoum, Faculty of Agriculture. M.Sc. in Soil Microbiology, 1997.
- 1999-2002, Ehime University, The United Graduate School of Agricultural Sciences, Japan. PhD in Soil Chemistry and Mineralogy, 2002.

3. Experience

- **Assistant professor**
2016- to date Institute of Environmental Studies , University of Khartoum
- **Assistant Professor**

2002- to 2016 National Center for Research; Dry land and
Desertification Institute

- **Researcher**

1997– 2002 National Center for Research; Environmental and
Natural Resources Research Institute (ENRRI); Dry land and
Desertification Department

- **Assistant Researcher**

National Centre for Research; National Centre for Research;
(ENRRDI); Environmental and Natural resources and
Desertification Research Institute

4. Publications:

Publications in Refereed Journals

Thesis

1. Effect of Rhizobium Inoculation, Nitrogen Fertilization on Nodulation Nitrogen Fixation and Yield of Different Chickpea Cultivars, M.Sc. Thesis, [University of Khartoum](#), Sudan, 1997
2. Adsorptive Reaction of Molybdate with Nano-Ball Allophane and Its Molecular Orbital Mechanism, PhD Thesis, The United Graduate School of Agricultural Sciences, Japan., 2002

REFREED JOURNALS

1. Fatoma Ali Mohammed Rezig , Elsadig Agabna [Elhadi](#) and Mubarak Abdelrahman Abdalla (2016) Decomposition and Nutrient Release of Wheat and Guar Residues Using the Litterbag Method. ENVIRONMENT AND NATURAL RESOURCES INTERNATIONAL JOURNAL (ENRIJ) 1(1) 23-32.

2. Mamdouh Sharafeldin Abdalkarim Shashoug, Mubarak Abdelrahman Abdalla Elsadig Agabna Elhadi, Fatoma Ali Mohamed Rezig (2016) Response of fodder sorghum (*Sorghum bicolor* (L.) to sewage sludge treatment and irrigation intervals in a dryland condition. Eurasian J Soil Sci 2017, 6 (2) 144-153.
3. E. A. **Elhadi** • A. R. Mubarak • F. A. M. Rezig (2016) Effects of organic amendments on sand dune fixation. International Journal of Recycling of Organic Waste in Agriculture. 5:1–8 DOI 10.1007/s40093-015-0111-5
4. Fatoma A. M. Rezig, Elsadig A. **Elhadi** Mubarak R. Abdalla (2014) Decomposition and nutrient release pattern of wheat (*Triticum aestivum*) residues under different treatments in desert field conditions of Sudan International Journal of Recycling of Organic Waste in Agriculture. 3:6 DOI 10.1007/s40093-014-0069-8
5. Fatoma A. M. Rezig , E. A. **Elhadi** & A. R. Mubarak (2013) Impact of organic residues and mineral fertilizer application on soil–crop systems I: yield and nutrients content, Archives of Agronomy and Soil Science, 59:9, 1229-1243, DOI: [10.1080/03650340.2012.709622](https://doi.org/10.1080/03650340.2012.709622)
6. Rezig F.A.M, Mubarak A. R. and **Elhadi** E. A. (2013) **Impact** of organic residues and mineral fertilizer application on soil-crop system: II soil attributes. Impact of organic residues and mineral fertilizer application on soil–crop system: II soil attributes, Archives of Agronomy and Soil Science, 59:9, 1245-1261, DOI: 10.1080/03650340.2012.709623
7. F.A.M Rezig, **EA Elhadi** and AR Mubarak (2012) Effect of incorporation of some wastes on a wheat-guar rotation system on soil physical and chemical properties. International Journal Of Recycling of Organic Waste in Agriculture 1:1doi:10.1186/2251-7715-1-1.

8. Magdoleen G. Osman, Elsadig A. **Elhadi**, and Mutasim M. Khalafalla (2011) *In Vitro* Screening of Some Tomato Commercial Cultivars for Salinity Tolerant. International Journal of Biotechnology and Biochemistry. ISSN 0973-2691 Volume 7, Number 5 (2011) pp. 543-552. <http://www.ripublication.com/ijbb.htm>
9. Hussien M. Daffalla, Rami S. Habeballa¹, Elsadig A. **Elhadi** and Mutasim M. Khalafalla (2011) Random amplified polymorphic DNA (RAPD) marker associated with salt tolerance during seeds germination and growth of selected Acacia Senegal provenances. African Journal of Biotechnology Vol. 10(31), pp. 5820-5830, 29 June, 2011.
10. Hussien H. Daffalla, Eltayb Abdellatef, Elsadig A. **Elhadi**, and Mutasim M. Khalafalla (2011). Effect of Growth Regulators on In Vitro Morphogenic Response of *Boscia senegalensis* (Pers.) Lam. Poir. Using Mature Zygotic Embryos Explants. Biotechnology Research International Volume 2011, Article ID 710758, 8 pages.
11. Mutasim M. KHALAFALLA, Hussien M. DAFFALLA, Eltayb ABDELLATEF, Elsadig Agabna **Elhadi** and Hany A. ELSHEMY (2011). Establishment of an in vitro micropropagation protocol for *Boscia senegalensis* (Pers.) Lam. ex Poir . *J Zhejiang Univ-Sci B (Biomed & Biotechnol)* 2011 12(4):303-312.
12. Mohamed B.B., Fadlalla. H.A. and **Elhadi** E.A (2009) Effect of Potassium fertilization on Alfalfa Forage Yield and Yield Components AlbuHuth , 12 (2) 30-41
13. Mutasim M. Khalafalla, Magdoleen G. Osman and Elsadig Agabna **Elhadi** (2010) Potassium and calcium nitrate ameliorates the adverse effect of NaCl on in vitro

- induced Tomato (*Lycopersicon esculentum* Mill.) International Journal of Current Research Vol. 6, pp.068-072, July, 2010 [BDF](#)
14. Magdoleen G. Osman¹, Elsadig A [Elhadi](#). Elhadi and Mutasim M. Khalafalla (2010) Callus formation and organogenesis of tomato (*Lycopersicon esculentum* Mill, C.V. Omdurman) induced by thidiazuron. African Journal of Biotechnology Vol. 9(28), pp. 4407-4413. [BDF](#)
15. Hassan, M.M., Osman M.G., Fatoma A.M., [ELhadi](#) ,E.A Babiker A.E (2010) Effect of Salinity on *Striga hermonthica* Seed Germination and Incidence on Infested Sorghum. Current Research Journal of Biological Sciences 2(3): 210-213, 2010. [BDF](#)
16. [Elhadi](#) E.A, Magzoub M.K and Deyab, E.A (2009) Effect of Irrigation with Saline Water on Three Acacia Species and Eucalyptus Seedlings. In : Sustainable Management of Saline Waters and Salt-Affected Soils in Agriculture, Proceedings for the Second Work Shop 15-18 November 2009. Aleppo, Syria Editor Manzoor Qadir et al.45-50.
17. Mohamed B.B., Fadlalla. H.A. and [Elhadi](#) E.A (2009) Effects of Seed Bed Preparation and Potassium Application on Alfalfa Yield. Journal of Science and Technology. Vol. 10(3) 2009 [BDF](#)
18. [Elhadi](#), E.A. , Abualgasim, M,R., and Dahab, M.H (2008) Tillage Implements Effect on Three Soil Physical Properties of Elrawakeeb Dry .Land Research Station, Albuhuth , 12 (1) 30-41
19. Elhag M.M, El Hiraika A.A, [Elhadi](#) E.A and Saad. S.A (2006) Classification of El Rawakeeb soil , Albuhuth , 10 (2) 45-56

20. **Elhadi**, E.A ., Matsue N. and Henmi T. (2000). Adsorption of Molybdate on Nano-Ball Allophane, Clay Science, 11: 189-204. [Abstract](#)
21. **Elhadi**, E.A ., Matsue N. and Henmi T. (2001). Effect of Molybdate on Adsorption on Some Surface Properties of Nano-Ball Allophane, Clay Science, 11: 405-417 [Abstract](#)
22. **Elhadi**,E.A. and Elsheikh ,E.A.E (1999). Effect of Rhizobium Inoculation and Nitrogen Fertilization on Yield And Protein Content of Six Chickpea (*Cicer Arietnum* L) Cultivars in Marginal Soils under Irrigation, Nutrient Cycling In Agroecosystems, 54: 57-63. [Abstract](#)

Proceedings in conferences

23. **Elhadi**, E.A., Rezig, F.A.M. and Mubarak, A.R. 2016. Litter Decomposition and Nutrient Release from Three Tree species in Sand Dunes in the Dry Tropics of Sudan. 2nd International Conference On Agriculture, Food Security & Biotechnology October 17th – 18th, 2016 Khartoum – Sudan
24. **Elhadi**, E.A., Rezig, F.A.M. and Mubarak, A.R. 2015. Variations in Nitrogen Mineralization from Water Hyacinth (*Eichhornia crassipes*) on Salt-Affected Soils. The 10th Scientific Conference of the National Centre for Research “Research and Innovation Towards Knowledge-Based Economy” 1-3 December 2015, Friendship Hall Khartoum, Sudan.
25. Fatooma Ali Mohame Rezig, Nazar Omer Hassan Salih, Mubarak Abdalla, Elsadig **Elhadi**, Ali Ahmed Hassabo (2013) Nitrogen Availability during Decomposition of Wheat (*Triticum aestivum*) and Guar Crop Residues (*Cymopsis tetragonoloba*) in a Desert Soil “Agricultural development within the rural-urban continuum” Tropentag, September 17-19, 2013, Stuttgart-Hohenheim.
26. Elsadig **Elhadi**, Mubarak Abdalla, Fatoma Rezig. 2012. Improvement of Sand Dune Properties with Organic Waste Application for Sand Dune Fixation. Tropentag, September 19-21, 2012, Göttingen-Kassel/Witzenhausen, Germany.

27. Fatoma Rezig, Elsadig **Elhadi**, Mubarak Abdalla. 2012. Soil Organic Matter Fractions in Desert Tropics as Influenced by Application of Organic Residues. Tropentag, September 19-21, 2012, Göttingen-Kassel/Witzenhausen, Germany.
28. Rezig F.A.M, **Elhadi E. A.** and Mubarak A. R. Effect of incorporation of some wastes on a wheat- guar rotation system on soil physical and chemical properties. The 1st International and 4th National Congress on Recycling of Organic Wastes in Agriculture. Islamic Azad University, Khorasgan Branch (Esfahan) Faculty of Agriculture. 26-27 April 2012.
29. Rezig F.A.M, Mubarak A. R. and **Elhadi E. A.** . Effect of incorporation of some wastes on a wheat- guar rotation system on Yield and nutrients contents. The 1st International and 4th National Congress on Recycling of Organic Wastes in Agriculture. Islamic Azad University, Khorasgan Branch (Esfahan) Faculty of Agriculture. 26-27 April 2012.
30. Mohamed B.B., Fadlalla. H.A. and **Elhadi E.A** (2009) Influence of Potassium on Alfalfa Yield and Yield Components. Ninth Scientific Conference, National Centre for Research Khartoum 22-24 December.
31. Hassan M.M Gamer Eldeen M., Mohammed F.A , **ELhadi E.A**, and Babiker E.A (2009) Effect of Salinity on *Striga Hermonthica* Seed Germination and Haustorium Initiation. Ninth Scientific Conference, National Centre for Research Khartoum 22-24 December.
32. **Elhadi** Elsadig, Naoto Matsue and Teruo Henmi (2001) Change in Charge Charactersitic of Allophane Associated with Molybdate Adsorption Japanese Society of Soil Science and Plant Nutrition. Kochi, Japan 2001
33. **Elhadi** Elsadig, Naoto Matsue and Teruo Henmi (2001) Effect of Molybdate Adsorption on Some Surface Properties of Nano-Ball Allophane Japanese Society Of Clay Science, Vol. 45, 102-103, Saitama, Japan, 2001
34. **Elhadi** Elsadig, Naoto Matsue and Teruo Henmi (2000) Effect of Concentration and pH on The Adsorption Of Molybdate on Nano-Ball Allophane , Japanese Society Of Clay Science, Hokkaido, Japan, 2000.

Publications in Annual Scientific Reports

1. Elhadi, E.A, Elhag A. Elnasikh M.H (2003) The Effect of the Addition of Organic Amendment on some Soil Physical and Chemical Properties of Elrawakeeb Soil. First Annual Scientific Report., Desertification Research Institute. Khartoum Sudan. In Arabic
2. Elnasikh M.H, Abdelraheem H and Elhadi E.A (2003) Quality of Boreholes Water in Elrawakeeb Dry Land Research Station (RDLRS) First Annual Scientific Report., Desertification Research Institute. Khartoum Sudan
3. Elnasikh M.H, Elhadi E.A and Osman A.G (200) The Effect Of Phosphobacterin on the Efficiency of Some Different Sources of Phosphate Fertilizers. 10th Annual Scientific Report. Environmental And Natural Resources Research Institute , Khartoum Sudan. In Arabic

5. Supervision

Ph.D. students (ongoing)

1. Ibrahim Ali Osman (2010) Utilization of Composted Baggasse Water Hyacinth And Banana Waste in Reclamation of Desert Soils. Desertification and Desert Cultivation Studies Institute. U of K . Co supervisor.
- 2.

M. Sc. And PhD student (awarded)

1. Bahaelden Babiker Mohamed Elhag (2007) Effect of Sowing Methods and Potassium Application on the Performance of Two Alfalfa Cultivars (Medicago Sativa) Sudan Academy of Science (SAS) . (Co supervisor)

2. Majd Aldin Abualgasim Rahamat Allah (2006) Effect of Different Tillage Systems on Yield of Fodder Sorghum in West Of Khartoum State, University Of Khartoum, Faculty Of Agriculture. (Co supervisor).
3. Magzoub Khalid Magzoub(2006)The Performance of some Acacia Species and Eucalyptus Comudalensis under Salt Stress in the Nursery Stage. Sudan University of Science and Technology. (Supervisor)
4. Magdoleen Gamer Eldeen (2008) In vivo and In vitro Studies on Tolerance of Some Tomato Varieties to Salinity. Sudan Academy of Science (SAS). Co supervisor.
5. Fatoma Mohamed Ali (2009) The Contribution of Some Organic Wastes in Sustainable Production of Cereal-Legumes Rotation System in a Nutrient Poor Sandy Soil . Sudan Academy of Science (SAS). Co supervisor.

6. On going research

1. Recycling of organic waste for sustainable production
2. Sand dune fixation.
3. Reclamation and amelioration of degraded land (salinity and poor fertility).
4. Sodium removal during phytoremediation of calcareous salt-affected soils through H-proton release from some selected legumes. (joint research)

7. Other activities

1. Teaching scientific writing and research methodology at Sudan Academy of science from 2008-up to date
2. Editor for the Journal of environmental and sustainable development research (in Arabic)
3. Teaching assistant university of Khartoum Faculty of agriculture: I teach physical chemistry soil physics, chemistry and classification for the period from 1993-1997

8- Workshops

1. Intellectual property right, creativity and commercialization. Khartoum Sudan 23-30 March 2008.
2. Course on AGORA/HINARI/OARE : April-May 2008. Khartoum Sudan.

3. International training course on long term monitoring of terrestrial ecosystem. China Beijing; 26/8-14/9 2012.