



YOUNES DAW Z. EZLIT

PERSONAL INFO:

Name: Mr. Younes Daw Z. Ezlit.

Nationality: Libyan

Gender: Male

Birthday: 10/12/1970

Position: Professor (Associate), department of soil and water, university of Tripoli.

Education: PhD in agriculture engineering 2009, University of Southern Queensland, Toowoomba, Australia.

Address: Ayn Zarah, Tripoli, Libya.

E-mail: Y.ezlit@uot.edu.ly

BACKGROUND:

Younes Ezlit has an extensive background in the areas of irrigation, soil physics, and root zone salinity. He has strong interest in the use of the saline water resources in irrigation. He has good experience in modeling water and solute movement within the root zone under sodic and saline conditions. He has previously been involved with researches investigating water productivity, salinity, and sodicity and soil structure stability with a number of institutions, namely ICARDA, CRC IF, NCEA, SARDI, FAO. His PhD research work aimed to investigate soil structure stability and manage using of high sodic and saline water in irrigation.

FIELDS OF EXPERTISE:

- Soil structure and dispersion, salinity and sodicity, soil water and solute movement (Root zone and large scale).
- Irrigation management, water use efficiency and water productivity.
- Spatial analyses of soil chemical and physical properties.
- Integrated water resources management in Libya.

NOTABLE PUBLICATIONS:

PEER REVIEWED JOURNALS:

- Alghariani, S. A, Ekhmaj, A. I, Ezlit, Y. D and Elaalem, M. M. 2020. Irrigated Agriculture under limited water supplies: Is it sustainable? Northwestern Libya as a case study. The Libyan Journal of Agriculture, 25(1-2): 1 – 12.
- Elaalem, M. M. **Ezlit, Y. D.** and Elgmati A. A. 2020. Application of inverse distance weighting in mapping some of soil chemical properties in Ayn Hizam, Qaryat Batth and Taknis. Journal of Misurata University of Agriculture, 2(1): 1 – 18. (Arabic print).
- Ekhmaj, A. I, **Ezlit, Y. D** and Elaalem, M. M. 2019. More irrigated crop production with less water use. . Journal of Misurata University of Agriculture, 1:2018 -226. (Arabic print).
- Elaalem, M. M., **Ezlit, Y. D.**, and Abdelslam, A. G. 2019. Modeling groundwater vulnerability to ground surface pollution sources (Case study Jeffara Plain, Libya). 24(1): 38-58. (Arabic print).
- Aboglila, S; Elaalem, M; **Ezlit, Y. D.** And E. Farifr. 2018. Geochemical Characteristics of Six Formations Based on Organic Geochemical Parameters, Murzuq Basin, Libya. Advance in Research, 15(4): 213 - 223.
- Dulayoum, M.M.; Ekhmaj A. I.; **Ezlit, Y. D.** and Elgzeli, Y. M. 2017. Estimation of some hydraulic characteristics of Jefara plain using artificial neural networks. The Libyan Journal of Agriculture. 22(2): 10-31.
- Algazili, Y. M. and **Ezlit, Y. D.** 2017. Impact of land reclamation and erosion combat in Arban project on the environmental balance (Arabic Print). Alkhalem Amobeen Journal. 3: 97 - 106.
- Betelmal , A. G., Elaalem, M.M. and **Ezlit, Y. D.** 2016. Mapping quarry dust prevalence in Sasso Valley using geographic information system. Journal of Science Faculty, University of Musrata. 6: 10 -19.
- AbduSalam, M. I., Elaalem, M. M., Dribika, M. S. Ekhmaj, A., and **Ezlit, Y. D.** 2016. Land cover change detection in Garabulli using remote sensing and GIS techniques in the period of 1992 to 2010. Al Mukhtar Journal of Sciences, 31(1): 91 -106.
- Ezlit, Y. D.**, Ekhmaj, M. M. And Elaalem, M. M.. 2014. Artificial Neural Networks to predict decreasing saturated hydraulic conductivity in soils irrigated with saline-sodic water. Journal of Natural Resources and Development. 04: 27 – 33.
- Ezlit, Y.D.**, Bennett, J.M., Raine, S.R. and Smith, R.J. 2013. Modification of the McNeal Clay Swelling Model Improves Prediction of Saturated Hydraulic Conductivity as a Function of Applied Water Quality. Soil Science Society of America Journal. 77(2): 2149-2156.
- Ekhmaj, A. I., Ben Zagta, M., **Ezlit, Y. D.** and Shaghleb, A. 2013. Estimation of the reference evapotranspiration in Sirt region using artificial neural networks. The Libyan Journal of Agriculture. 17(3, 4): 56-61.

BOOKS AND TECHNICAL REPORTS:

- Saad A. Alghariani, **Ezlit, Y.D.** Ekhmaj, I.A. and Elaalem, M.M. 2015. Monitoring and evaluation of the economic and environmental impacts of irrigated agriculture in North-western Libya Part III (Arabic print). National Agency for Scientific Research No: 3/4.
- Saad A. Alghariani, **Ezlit, Y.D.**, Ekhmaj, I. A., and Elaalem, M.M.2014. Monitoring and evaluation of the economic and environmental impacts of irrigated agriculture in North-western Libya Part II (Arabic print). National Agency for Scientific Research No: 2/4.
- Saad A. Alghariani, **Ezlit, Y.D.** Ekhmaj, I.A. and Elaalem, M.M.2013. Monitoring and evaluation of the economic and environmental impacts of irrigated agriculture in North-western Libya Part I (Arabic print). National Agency for Scientific Research No: 1/4.
- Eshkab, I., Elaalem, M. M., **Ezlit, Y. D.** Shanta, M. And Alwair, H. 2013. Investigation of the negative environmental impacts of quarries in the central region (Wadi Sasso) (Arabic Print). Libyan Ministry of Agriculture.
- Ezlit, Y.D.**, Smith, R. J. and Raine, S.R. 2010. A review of salinity and sodicity in irrigation. CRC for Irrigation Futures Irrigation Matters Series No. 01/10.
- Raine, S.R. and **Ezlit, Y.D.** 2007. Evaluation of the soil physical impacts associated with applying coal seam gas water amended with sulphuric acid for irrigation purposes. National Centre for Engineering in Agriculture Publication 1002524/2, USQ, Toowoomba. Australia.

CONFERENCE PAPERS:

- Ezlit, Y. D.**, Ekhmaj, I.A., M. Elaalem, M.M. and Farjani, A.2015. Calibration of Hargreaves – Samani Equation for Better Estimating Reference Evapotranspiration in Northwest Libya. Rural Development Conference. 13-15 MARCH 2015 Bangkok- Thailand. 2015. Pp.19- 29.
- Ekhmaj, M. M., Ezlit, Y. D. And Elaalem, M. M. 2014. The situation of seawater intrusion in Tripoli, Libya. International conference on Biological, Chemical and Environmental Science. June 14-14. Malaysia.
- Elaalem, M. M., **Ezlit Y. D.**, Elfghi, A. and Abushnaf, F. 2013. Performance of supervised classification for mapping land cover and land use in Jeffara plain of Libya, International Conference on Food and Agricultural Sciences. Malaysia.
- Ezlit, Y. D.**, Ekhmaj, A. I., and Elaalem, M. M. 2013. Prediction of the reduction in saturated hydraulic conductivity associated with applications of saline-sodic waters using Artificial Neural Networks. First conference in Natural Resource management and Development, Chile.
- Ezlit, Y.D.**, Smith, R. J. and Raine, S.R. 2011. Management options to use highly saline-sodic water for irrigation. The 12th Annual Conference of Thai Society of Agricultural Engineering, Chonburi, Thailand.
- Ezlit, Y.D.**, Smith, R. J. and Raine, S.R. 2008. Development of a generic clay swelling model to predict the reduction in saturated hydraulic conductivity of soil irrigated with sodic –saline water. CRC IF Annual Research Forum, Canberra. Australia

MSc. THESES SUPERVISED:

Completed

- AShour, E. M. S. 2017. Estimation of some soil hydraulic properties using soil data easy to measure. MsC. Thesis. University of Tripoli. Libya. **(Supervisor)**.
- Daluom, M.M. M. 2016. Prediction of some soil physical properties in Jefara plain using Artificial Neural Networks. MsC. Thesis. University of Tripoli. Libya. **(Co-Supervisor)**.
- Faruj, A. G A. 2016. Modeling groundwater vulnerability to ground surface pollution sources in northwestern Libya. MsC. Thesis. University of Tripoli. Libya. **(Supervisor)**.
- Anbia, O. M. M. 2017. Establishing spatial Data base and producing interpretive maps for some soils chemical properties in Jeffara plain region. MsC. Thesis. University of Tripoli. Libya. **(Co-Supervisor)**.
- Makholuf, M. J. 2023. Production function for Sorghum crop under northwest Libya Conditions. MsC. Thesis. University of Tripoli. Libya. **(Supervisor)**.
- Elhamdi, A. M. 2023. Contribution Of Remote Sensing Data in Estimating Monthly Air Temperature (Case Study: Northwest Libya). . MsC. Thesis. University of Tripoli. Libya. **(Supervisor)**.
- Aburzeza, F. M. 2024. Using geostatsical method and pedotransfer functions within GIS environment to predict some of soil hydraulic properties for Jefara plain region. MsC. Thesis. University of Tripoli. Libya. **(Supervisor)**.

Current

- Abu - Zaid, N. M. **In progress**. Monitoring the contamination of surface ground water in Tajora region. MsC. Thesis. University of Tripoli. Libya. **(Supervisor)**.
- El Jayyar , S. K. **In progress**. Effect of spatial weather elements changes on reference evapotranspiration calculations. MsC. Thesis. University of Tripoli. Libya. **(Supervisor)**.
- Ben Rabha, M. A. **In progress**. Response of some wheat cultivars to different rates of deficit irrigation. . MsC. Thesis. University of Tripoli. Libya. **(Supervisor)**.
- Talha, A. A. **In progress**. Modeling the growth, development and production of sorghum crop. MsC. Thesis. University of Tripoli. Libya. **(Supervisor)**.

ACADEMIC WORK EXPERIENCE:

Date	From 2001 to present
Occupation or position held	Associate professor at University of Tripoli
Main activities and responsibilities	Teaching a number of courses which are: Principle of Irrigation Science, Water Science, and Soil Physical (including Lab). Other responsibilities were to assist growers and agricultural government organizations in managing irrigation and increasing water use efficiency with greater focus on sprinkler and drip irrigation systems, in addition, managing salinity problems.
Name and address of employer	Department of Soil and Water Science, Faculty of Agriculture, University of Tripoli, Tripoli Libya
Type of business or sector	Government Organization

EDUCATION:

Title of qualification awarded	PhD in Agriculture Engineering
Thesis Topic	Modelling hydraulic conductivity within soil profiles associated with application of saline-sodic waters
Name of Institution	University of Southern Queensland
Supervisors	Prof. Rod Smith, Prof. Steven Raine
Date	January 2010
Title of qualification awarded	Master of Soil and Water Science (Hons)
Principal subjects	Soil physics, Hydrology, evapotranspiration, water resource management, irrigation management.
Thesis Topic	Performance of a number of infiltration models in selected Libyan soils (Arabic print)
Name of Institution	Department of Soil and Water Science, Faculty of Agriculture, University of Tripoli

Supervisors	Prof. Khalil Suleiman, Dr. Hindi Asanusi
Grade/ Marks	3.52 of 4
Date	2000
Title of qualification awarded	Bachelor of Agriculture Engineering (Hons.)
Some of the principal subjects	Irrigation management and design, Soil Science, soil Physics, farm machinery, farm building design and land surveying, crop cultivation and storage techniques
Name of Institution	Department of Agriculture Engineering, Faculty of Agriculture, University of Tripoli
Grade/ Marks	69.54%
Date	Spring 88 /1989 -Fall 91 / 1992

NOTABLE WORKSHOPS ATTENDED:

- **AQUACROP model training workshop:**

ET0 calculations, the use of AQUACROP to increase of water use efficiency, irrigation scheduling, and maximizing crop productivity. International Centre for Agricultural Research in the Dry Areas (ICARDA). Prof. Theodore C. HSIAO. 1-5 August 2010, Aleppo, Syria.

- **Surface irrigation / SIRMOD training workshop:**

Surface irrigation design, the use of SIRMOD to increase of water application efficiency, methods to predict the parameters of the infiltration model (modified khostiacov). National Centre of Agriculture Engineering (NCEA). Prof. Rod Smith and Dr. Malcolm Gillies. 9-10 December 2008, Toowoomba, QLD, Australia.

- **Solute Signatures masterclass:**

Concepts of solutes problems in soils, tools relevant to management of solutes, decision making relevant to solute. Cooperative Research Centre for Irrigation Futures (CRC IF). Dr. Richards Stirzaker, Dr. Ian Goodwin, Dr. Tabas Biswas. 30 -31 March 2008 Adelaide, Australia.

- **Applied Modelling of Water Flow and Contaminant Transport in the Vadose Zone:**

Conceptual and mathematical description of water flow and solute transport processes in the vadose zone, modelling the hydraulic functions of unsaturated porous media based STANMOD, HYDRUS-1D and HYDRUS (2D/3D) software packages.

- **South Australian R&D Institute, CRC for Irrigation Futures & Flinders University.**

Prof. Jirka Simunek. 5 – 6 July 2007 Flinders University, Adelaide, Australia

- **Simulating Water Flow and Solute Transport in Two-Dimensional Variably Saturated Soils**

Commonwealth Scientific and Industrial Research Organization (CSIRO). Dr. David Rassam. 17-19 April 2007 CSIRO, Canberra, Australia

- **CRC IF Root zone water and solute management workshop**

Salinity risk minimization for site specific cases. Cooperative Research Centre for Irrigation Future (CRC IF). July 2006 Adelaide University, Adelaide, Australia.

PERSONAL SKILLS AND COMPETENCES:

Mother tongue(s): Arabic

Other languages: English

TECHNICAL SKILLS:

Very Good knowledge in irrigation science and management, managing salinity and sodicity problems, soil physical (including laboratory works), experimental design, and on farm management. Field studies regarding water resource management.

COMPUTER SKILLS:

Very good experience in Office Package, and sound knowledge of many advanced software packages in the areas of water and solute movement, irrigation science, and statistical and geostatistical softwares, example of these software are HYDRUS 1, 2, 3D (to simulate irrigation under different water application system, SIRMOD (to simulate application of surface Irrigation including furrow and basin), AQUACROP, CROPWAT V.8.0, and statistical programs such as TableCurve 3D, SPSS, Minitab, and Surfer.



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