

## CURRICULUM VITAE

### Personal Data



**Name** : *Nesreen Houssien Ahmed Abou-Baker*

**Job** : Professor of plant nutrition and soil fertility

**Date of Birth:** 21 /3 /1977

**Gender** : Female

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<https://www.scopus.com/authid/detail.uri?authorId=54400792200>

## Education

- Ph.D. Degree, Soil fertility and plant nutrition, Natural Resources Dept., Institute of African Research and Studies, Cairo University, Egypt (2008).

Title: "Effect of organic fertilization on reducing pollution and rationalization of irrigation water in Egypt and Libya".

- M.Sc. Degree, Soils, Soils Dept., Faculty of Agriculture, Cairo University, Egypt (2003).

Title: "Studies on phosphorus in some soils of Egypt".

- B.Sc. of Agricultural Science, Soils Dept., Faculty of Agriculture, Cairo University, Egypt (1998)

## Job History

- Assistant Researcher, Soils and Water Use Dept., National Research Centre (8/5/2004- 1/ 6/ 2008).
- Researcher, Soils and Water Use Dept., National Research Centre (1/6/2008- 5/12/2013).
- Associate Professor, Soils and Water Use Dept., National Research Centre (5/12/2013- present).

## Experience

- Work at a nitrogen-fixing unit, Faculty of Agriculture, Cairo University in the period from 1/8/1998 till 30/11/1998.
- Work at the Institute of Soils and Water and the environment in the period from 1/12/1998 until 7/5/2004.
- Working in several Special Units as "Production of fertilizers", "Evaluation of soil pollution" and "Land resources Evaluation and Mapping".

- Have a good experience in soil, water, fertilizer and plant analyses.
- Internet surfing and data collection
- Good awareness of some statistical analysis programs, such as Co-Stat, Minitab and graphic program (Harvard graphics).

### Training courses

1. **ICDL** (International Computer Driving License) courses, Ministry of Communications in cooperation with UNESCO, Cairo-Egypt.
2. **Scientific Writing**, Training course, held at Training Centre, National Research Centre in the period from 19/6/2004 to 30/6/2004.
3. A training course in "**Preparation, presentation and teaching lectures**", held at Training Centre, National Research Centre in the period from 24/9/2005 to 3/10/2005.
4. Training course in "**Field experiments design, fertilizer materials evaluation and mineral elements determination in soil and plant**", The Egyptian sulphur project at National Research Centre in the period from 1/7/2004 to 30/12/2004.
5. **Compost Production**, Training course, held at Training Institute of Veolia Environmental Services, 27<sup>th</sup> of August 2008.
6. A Training course in "**DOS**", held at Cairo University
7. Training courses in "**Word, Power Point, Access, Excel**", held at Training Centre, National Research Centre
8. A training course in "**Internet Basics**", held at Training Centre, National Research Centre
9. Courses in the **English language** from Cairo University and the Institute of Languages of Defence Ministry.
10. A Course in "**Civil Defence**", held at Training Centre, National Research Centre

11. A training course in "**Safety and occupational health**" held at Training Centre, National Research Centre
12. A training course in "**New workers**", held at Training Centre, National Research Centre.
13. A training course in "**Principals of scientific presentation**", held at Training Centre, National Research Centre.
14. A training course in "**Principals of Biostatistics in scientific research**", held at Training Centre, National Research Centre.
15. A training course in "**The Principals of statistical analysis in scientific research**" held at National Research Centre.
16. A training course in "**Preparation of research project proposals**", held at National Research Centre.
17. A training course in "**Basics of industrial wastewater treatment**", held at Egyptian Syndicate of Scientific Professions, in 24-26 February 2014.
18. A training course in "**Mind maps**" held at National Research Centre, 18/5 – 21/5/ 2014.
19. A training course in "**nanosafety**" held at National Research Centre, 9/6 – 11/6/ 2014.
20. A training course in "**Assessment of the impact of the climate change on food and agriculture in Egypt**" held at the Climate Change Information Centre and Renewable Energy, Ministry of Agriculture and Land Reclamation. 18/4 – 21/4/2015.
21. A training course in "**Geographic Information Systems and ArcGIS program**" held at the Climate Change Information Centre and Renewable Energy, Ministry of Agriculture and Land Reclamation. 2/6 – 4/6/2015.
22. A training course in "**SPSS**", held at National Research Centre, 15-19/1/2017.
23. A training course in "**End Note**", held at National Research Centre, 10-12/1/2017.
24. A distance course in "**How to write an abstract and improve your article**" Elsevier publishing campus on Friday 8 December, 2017.

## Lectures

1. A lecture to simplify the science in the framework of cooperation between the National Research Centre and General Egyptian Society for the talented, purpose of disseminating scientific culture in society.
2. A lecture at Plant Nutrition Department - National Research Centre.
3. Teaching in a training course entitled "Use of Environmental device to estimate the different forms of nitrogen" in the period from 20/9/2011 to 22/9/2011.
4. Teaching in a training course entitled "Development and management of new reclaimed soils" in the period from 3/6/2012 to 21/6/2012.
5. Teaching in summer training course for Faculty of Science students in the period from 1/7/2012 to 15/7/2012.
6. Teaching in summer training course for Faculty of Science students in the period from 26/7/2012 to 9/8/2012.

## News Media

1. An article in the agricultural magazine entitled "Studies on phosphorus in some soils of Egypt" in Issue No. 540 November 2003.
2. An article in the future magazine entitled "New Fertilizers environmentally friendly" in Issue No. 32 of 2009.
3. An article in the Scientific Site [www.Scidev.net](http://www.Scidev.net) entitled " Banana compost could boost crop yields, a study finds", November 2<sup>nd</sup> 2011.
4. An article in the Scientific Site [www.Scidev.net](http://www.Scidev.net) entitled " A Egyptian researcher presents the agriglass to enhance sandy soils fertility", 2/9/2015 .
5. An article in the Akhbar journal entitled "The agriglass" in Issue No. 19805, 1/10/2015.

## Attending Conferences, Workshops and Symposiums

1. Attend the conferences organized by the Egyptian Soil Science Society from 2004 till 2015.

2. Attending and successfully participating in a symposium entitled "The Clean Agriculture between investigation and application" in the period from 7/5/2006 to 9/5/2006.
3. A workshop entitled "The Future of Soil Science" organized by the National Committee for Soil Science in the period from 18/5/2008 to 22/5/2008.
4. Attend and actively participate in the international symposium entitled "Towards a Sustainable Agriculture Environment (Part 1, 2 and 3), April 27<sup>th</sup>, May 24<sup>th</sup> and June 29<sup>th</sup> 2010, National Research Centre.
5. Attending and successfully participating in the 1<sup>st</sup> international conference entitled "Sustainable Water Supply and Sanitation", held during 25-27 July 2010, at the Cairo International Conference Centre.
6. Attend and participate in a symposium entitled "Hydrology of Nile river and the factors affecting the Egyptian quantity of water" November 10<sup>th</sup> 2010.
7. Attending and participating in the 1<sup>st</sup> workshop entitled "Agriculture Between the actual challenges and the future looking", March 27<sup>th</sup> 2011, National Research Centre.
8. Attend and actively participate in a symposium entitled "Design and analysis of biological experiments using the program of CoStat V.6.400" April 27<sup>th</sup> 2011, National Research Centre.
9. Attend and actively participate in a symposium entitled "Egyptian Economy between reality and expectations" June 5<sup>th</sup> 2011, National Research Centre.
10. Attending workshop entitled "Future of the world water resources ", November 28<sup>th</sup> 2011, and participating in a workshop entitled "Using of simulation models in agriculture, saltmed model" November 29<sup>th</sup> 2011.
11. Attending workshop entitled "The Environment and Bio agriculture", ", held during 2-3 April 2012, at National Research Centre in cooperation with the University of Cairo.
12. Attending the 1<sup>st</sup> scientific symposium organized by the Agricultural and Biological Division entitled "The problems of Egyptian Agriculture" By Prof. Dr. Saad Nassar, October 14<sup>th</sup> 2012.

13. Participating in the 10<sup>th</sup> conference of the Egyptian Soil Science Society (ESSS), 4<sup>th</sup> international conference on farm irrigation and agronclimatology "Towards optimal utilization of soil and water technologies" held during 5-8 November 2012, Ameria, Alexandria, Egypt.
14. Attending the 2<sup>nd</sup> scientific symposium organized by the Agricultural and Biological Division entitled "Water issues in Egypt and the role of scientific research in the resolution" By Prof. Dr. Dia El Din El Quosy, 11/11/2012.
15. Attending and national conference of the Agricultural and Biological Division entitled "The Agriculture Development in Sinai", held during 10-11/12/2012, at the National Research Centre.
16. Attending and successfully participating in 1<sup>st</sup> national conference of the Scientific Research and Civil society, 24/12/2012, at the Cairo International Conference Centre.
17. Attending the 3<sup>rd</sup> scientific symposium organized by the Agricultural and Biological Division entitled " grain production between hope and reality" By Prof. Dr. Abdel-Salam Gomaa, 30/1/2013.
18. Attending the 4<sup>th</sup> scientific symposium organized by the Agricultural and Biological Division entitled " The importance of and how to apply for a patent" By Prof. Dr. Adele Aweda, 18/2/2013.
19. Participating in organizing of a workshop entitled "Data Statistical Analysis Using SPSS Program; Statistical Basic and Practical Application" March 31, 2013, National Research Centre.
20. Attending the 5<sup>th</sup> scientific symposium organized by the Agricultural and Biological Division entitled " The Organic Farming for a Clean Environment" By Prof. Dr. Reda El Nahrawy, 23/4/2013.
21. Attending the 1<sup>st</sup> international conference of Water Desalination in the Arab Region, the future prospects, 26/5/2013, at El-Azhar Conference Centre.
22. Participating in a workshop entitled "Bioremediation of sewage soils " 2/9/2013, at National Research Centre.
23. Attending the first international conference "food and agriculture: New Approaches", December 2-4, 2013.

24. Attending the scientific symposium organized by the Agricultural and Biological Division entitled " Sustainable development, food security and Canadian funding program" By Prof. Dr. Abdel-Kader Ghaly Professor of Bioengineering and Environment "Dalhousie University" and Chairman of "The Canadian Society of Bioengineering", held at National Research Centre, 21/1/2014.
25. Attending and participating in the symposium of "Standards and Ethics of the international publication" February 9, 2014, National Research Centre.
26. Attending a workshop entitled "Applications of Biotechnology in Agriculture" Sunday 23<sup>th</sup> February, 2014, National Research Centre.
27. Attending and participating in a conference of "Water Security: Challenges and solutions" As an organizer, 29<sup>th</sup> April, 2014.
28. Attending and participating in a symposium of "Future of magnetic Agriculture in Egypt" As an organizer, 30<sup>th</sup> April, 2014.
29. Participating in a workshop entitled "Nanotechnology in Agriculture" 3<sup>rd</sup> March, 2014, at National Research Centre.
30. Participating in the 1<sup>st</sup> conference of soil and water Dept., Faculty of Agriculture, Kafr El-Sheikh Univ., and 11<sup>th</sup> international conference of the Egyptian Soil Science Society (ESSS), "Climate change and sustainable Development of Natural Resources" held during 5-7 May 2014, Kafr El-Sheikh, Egypt.
31. Participating in the 4<sup>th</sup> International workshop and conference on "Nanomaterials and Nanodevices" December 8-9, 2014, National Research Centre.
32. Attending the scientific forum of "Innovation in Agriculture", held at National Research Centre, 27-28/1/2015.
33. Attending " Chemical Lab Safety and Security" Symposium", held at National Research Centre, January 28<sup>th</sup> 2015.
34. Participating in the 6<sup>th</sup> International Conference of the Egyptian Society for Environmental Sciences (ESES) "Genetics, Biotechnology and Sustainable Development in Safe Environment" 2<sup>nd</sup> -4<sup>th</sup> February, 2015.



35. Attending the scientific symposium of “Modern strategies to Reduce Food Contaminants” organized by Food Toxicology and contaminants Dept., at National Research Centre, 25/2/2015.
36. Participating in a workshop entitled "Future vision of using ornamental plants and woody trees for combating of desertification and phyto-remediation of environmental pollutants" April 15, 2015, at National Research Centre.
37. Attending and participating in the International Conference “Agriculture and Environment for sustainable Development” as an organizer, held at National Research Centre, May 25 - 27, 2015.
38. Participating in a workshop entitled “The Use of Agricultural Wastes in Mitigating the Industrial Challenges and Formulating New Energy Alternatives” May 31<sup>st</sup>, 2015, at National Research Centre.
39. Participating in the 1<sup>st</sup> conference of soil and water Dept., Faculty of Agriculture, Suez Canal Univ., and 12<sup>th</sup> international conference of Egyptian Soil Science Society (ESSS), "Development of water and soil Resources: Challenges and Solutions" held during 7-9 March 2016.
40. Attending international workshop entitled "Climate change and combat desertification for agriculture production in Egypt and China", April 27, 2016, at National Research Centre.
41. Attending a workshop entitled “Safety and occupational health”, 22/10/2017, at National Research Centre

### **Involvement in Funded Research Projects**

- 1- Preparation of some glassy fertilizers containing micro-and macro elements for increasing production of rice and corn plants- 8040773, (June 2007 to June 2010), National Research Centre.
- 2- Conversion of Agricultural Wastes into products. This project funded by STDF (Egypt) from 12/5/2009 to 30/6/2013.

- 3- Growing and improving some Bio- fuel crops in less fertile soils using waste water, 9010405 (from 2011 to 2013), National Research Centre.
- 4- " Sustainable management of adverse impacts on farming and soil ecosystem associated with long term use of low quality irrigation water" This project funded by STDF (Egypt) and IRD (France)
- 5- Economic Conversion of Agricultural Wastes into Both Super absorbent Cellulosic Hydrogel and Agriglass for the Application in Both the Optimization of Water Resources and Fertilizers in Agriculture. This project funded by STDF (Egypt).
- 6- Improving production and quality of some biofuel crops grown using poor quality water in lands not for food production, Project Code 10040406
- 7- Assessment and reclamation of marginal soils in Sinai. This project funded by The National Research Centre Project Code 10060101
- 8- Spatial Analysis for Soil Salinity in Reaction to Agricultural Sustainability. International cooperation.
- 9- PI of the project "Integrated between biofertilization and zeolite in alleviating salt stress" 2015-2016.
- 10- Co-PI of the project "Impact of Climate Change on Land Suitability on the North Western Coast of Egypt for Wheat Production" 2016-2019.
- 11- "Wheat and common bean with improved tolerance to salinity, drought, and heat stress for sustainable production in Egypt" Project Code 11030129, 2016-2019
- 12- "Propagation of economic importance ornamental and woody plants using new applications. Project Code 11030152, 2016-2019.
- 13- Co-PI of the project "Modelling the Impact of Climate Change on Soil, Hydrological Resources and Agriculture Productivity in Egypt (MOICHR)" Project Code 12050505, 2019-2022.
- 14- Maximizing the productivity of the seedling of some woody trees of economical importance under environmental stress using eco friendly materials Project Code 12050138, 2019-2022.

- 15- Climate change risk assessment and its impact on the environmental degradation of Qarun Lake and its adjacent land, 2019-2022.
- 16- Co-PI of the project “Application of Remote Sensing Technology to Determine the Spatial and time Variation in Soil Phosphorus under Saline Soil and its effect on Soil Productivity.” Project code E120701, 2019-2022.

### **Societies and journals membership**

1. A member of the Egyptian Syndicate of Agriculture Professions,
2. A member of the Egyptian Soil Science Society.
3. A member of the Alumni Association of Faculty of Agriculture, Cairo University.
4. A member of the Clean Agriculture Systems Society.
5. A member of Agriculture, Chemistry and Environment Protection Society.
6. A general secretary of Special Unit entitled "Land Resources Evaluation and Mapping" at the National Research Centre.
7. One of the founders of the Young Researchers Society and chairman of the society 4/3/2015.
8. A board member of Researchers Club in the period from 12/2005 to 12/2009.
9. A member of the Technical Committee of Agricultural and biological research Div. At NRC from 1/3/2014 to 1/3/2015.
10. A member of “The Egyptian Society for Environmental Sciences (ESES)”.
11. A member of an international society “Agriculture-Nutrition Community of Practice”.
12. A member of “African Society of Nile Basin studies”.
13. A member of “Asian council of science Editors”
14. A member of Editorial board of “Asian Plant Research Journal”,  
SCIENCEDOMAIN international (SDI).
15. A member of Editorial board of “Asian Journal of Research and Review in Agriculture” Global Press Hub (GPH).

16. A member of Editorial board of “Plant cell biotechnology and molecular biology” journal.
17. A reviewer of "Journal of Genetic and Environmental Resources Conservation (JGERC)".
18. A reviewer of "Sky Journal of Agricultural Research (SJAR)".
19. A reviewer of "International Journal of Agricultural Policy and Research".
20. A reviewer of " African Journal of Agricultural Research”
21. A reviewer of "Agriculture Water Management” Elsevier.
22. A reviewer of “Journal of Agriculture Science and Technology”.
23. A reviewer of "Journal of Experimental Agriculture International”.
24. A reviewer of "Annual Research & Review in Biology”.
25. A reviewer of “Journal of the Saudi Society of Agricultural Sciences” Elsevier.
26. A reviewer of “Polish Journal of Soil Science”
27. A reviewer of “Silicon” journal “Springer”
28. A reviewer of “Bulletin of the National Research Centre” Springer.
29. A reviewer of “Arabian Journal of Geosciences” journal “Springer”
30. A reviewer of “Acta Scientiarum Polonorum” series Hortorum Cultus
31. A reviewer of “Journal of Soil Science and Agroclimatology”
32. A reviewer of “South-Western Journal of Horticulture, Biology and Environment”
33. A reviewer of “Beni-Suef University Journal of Basic and Applied Sciences” Springer.
34. A reviewer of “In Vitro Cellular & Developmental Biology” Springer.
35. A reviewer of " Journal of Genetic Engineering and Biotechnology” Springer.
36. A reviewer of " Journal of the Saudi Society of Agricultural Sciences” Elsevier
37. A reviewer of " Journal of Applied Research on Medicinal and Aromatic Plants” Elsevier.

**Awards progression and nomination**

- 1- The progression to "National research centre president award for the best applicable research", 2011 (not obtained).
- 2- The nomination to TWAS-ARO Young Arab Scientist (YAS) Prize 2013 by national research centre, (not obtained).
- 3- The nomination to Award for distinguished scientific Research Offered by MFK Foundation and BUE, 2014, (not obtained).
- 4- The nomination to IDB PRIZE FOR WOMEN'S CONTRIBUTION TO DEVELOPMENT, 10th EDITION, 2014, (not obtained).
- 5- Obtained to appreciation certificate for 5th place in the research outputs, 2014, associate professor rank, offered by the national research centre.

### **Academic Supervision Activity**

#### **Master of Science students:**

Doaa Abd-Elghany, Natural Resources Dept., Institute of African Research and Studies, Cairo University, Egypt.

Esraa Kotb, Soils Dept. Faculty of Agriculture, El-Menofia University, Egypt.

#### **PhD. students:**

Wafaa M. Abd El-Aziz Mohamed (2018): Decontamination of Polluted Soils Using Phytoremediation Technique. PhD Thesis, Faculty of Agriculture, Benha University, Egypt.

Nahed Abd-Elmoty, Natural Resources Dept., Institute of African Research and Studies, Cairo University, Egypt.

### **List of publications**

**Book:** Abou-Baker (2015) Organic fertilization, Pollution and Irrigation”, LAP LAMPERT Academic Publishing. **ISBN:** [978-3-659-37159-2](https://www.amazon.com/dp/9783659371592)

**Book Chapter:** Mehanna H. M., Hussein M. M., and Abou-Baker N. H., (2015) **Water Productivity and Fertilizer Use Efficiency of Drip Irrigated Maize”** In **Megh R. Goyal (2015) Water and Fertigation Management in Micro Irrigation”**, Apple Academic Press, Inc., Taylor & Francis group **ISBN: 9781771881067**.  
<http://www.appleacademicpress.com/title.php?id=9781771881067>

**Book:** Abou-Baker NH and El-Dardiry E (2015) **Integrated Management of Salt Affected Soils in Agriculture: Incorporation of Soil Salinity Control Methods**. Academic Press is an imprint of Elsevier. The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK. **ISBN: 978-0-12-804165-9**.

**Book Chapter:** Abou-Baker, N.H. 2020. Irrigation water use efficiency and economic water productivity of different plants under Egyptian conditions. In Technological and modern irrigation environment in Egypt: Best management practices & evaluation, Eds Omran, E-SE and Negm, AM, 205-19. Cham: Springer International Publishing.

1. Abou-Baker N.H., El-Maaz E.I.M. and Ahmed H.M.R.M. (2009) Some soil physical properties and some micronutrients statues under different fertilization types and irrigation levels on corn and bean plants grown in calcareous soil. Egypt. J. of Appl. Sci., 24(12B): 758-772.
2. Youssef R.A., Rasheed M.A., Gaber E.I., Silva J.A.T., Abd El Kader A.A. and Abou-Baker N.H. (2010) Evaluation of banana compost enriched with microorganisms on heavy metals concentrations in corn and bean plants. The African Journal of Plant Science and Biotechnology 4 (1): 54-58.
3. Rasheed M.A., Youssef R.A., Gaber E.I., Abd El Kader A.A., Silva J.A.T. and Abou-Baker N.H. (2010) The combined effect of organic and chemical fertilizers in relation to water irrigation on nutrients uptake of corn and bean plants. Plant Stress 4 (1): 64-71.

4. Abd-Eladl M., Abou-Baker N.H., El-Ashry S. (2010) Impact of compost and mineral fertilization irrigation regime on wheat and sequenced maize plants. *Minufiya J Agric. Res.* 35(6): 2245-2262.
5. Abou-Baker N.H., Abd-Eladl M. and Abbas M.M. (2011) Use of silicate and different cultivation practices in alleviating salt stress effect on bean plants. *Australian Journal of Basic and Applied Sciences*, 5(9): 769-781.
6. Hussein M.M., Mehanna H. and Abou-Baker N.H. (2012) Growth, photosynthetic pigments and mineral status of cotton plants as affected by salicylic acid and salt stress. *Journal of Applied Sciences Research*, 8(11): 5476-5484.
7. Abou-Baker N.H., Abd-Eladl M. and Eid T.A. (2012) Silicon and water regime responses in bean production under soil saline condition. *Journal of Applied Sciences Research*, 8(12): 5698-5707.
8. Eid T.A., Ali S.M.M. and Abou-Baker N.H. (2013) Influence of soil moisture depletion on water requirements, yield and mineral contents of potato. *Journal of Applied Sciences Research*, 9(3): 1457-1466.
9. Mehanna H.M., Hussein M.M., and Abou-Baker N.H. (2013) The relationship between water regimes and maize productivity under drip irrigation system: A Statistical Model. *Journal of Applied Sciences Research*, 9(6): 3735-3741.
10. Youssef R.A., Abd El-Rheem Kh.M. and Abou-Baker N.H. (2013) Establishment of DRIS indices for corn plants grown on sandy soil. *Life Science Journal*, 10(3): 1016-1020.
11. Youssef R.A., Abou-Baker N.H., Khater A. and Zaghloul A.M. (2013) Modelling of potassium uptake in arid region under water scarcity. *International Journal of Engineering and Innovative Technology (IJEIT)*, 3(4):442-448.
12. El-Ashry S.M., Hussein M.M. and Abou-Baker N.H. (2013) The potential for irrigating *Jatropha* with industrial drainage water under mineral fertilization. *Journal of Genetic and Environmental Resources Conservation (JGERC)* 1(3):276-286.

13. Hussein M.M. and Abou-Baker N.H. (2014) Growth and mineral status of moringa plants as affected by silicate and salicylic acid under salt stress. International Journal of Plant & Soil Science, 3(2):163-177
14. Atwa A., Abou-Baker N.H. and Nassr M.M.I. (2014) Soil properties, flax varieties production and their heavy metals content under irrigation with low quality water. Journal of Genetic and Environmental Resources Conservation (JGERC) 2(2):133-139.
15. Hussein M.M., Al-Ashry S.M., Wafaa Haggag and Abou-Baker N.H. (2014) Micronutrients status of biofuel plant (Moringa) irrigated by diluted seawater as affected by silicate and salicylic acid. International Journal of Engineering Research, 3(12): 720-725.
16. Hussein M.M., Al-Ashry S.M., Wafaa Haggag and Abou-Baker N.H. (2014) Effect of potassium foliar fertilizer on mineral status of biofuel plant (Jatropha) grown under irrigation by agricultural drainage water. International Journal of Scientific Engineering and Technology, 3(12): 1463-1467.
17. Hussein M.M., Youssef R.A. and Abou-Baker N.H. (2014) Influences of potassium foliar fertilization and irrigation by diluted seawater on growth and some chemical constituents of cotton. International Journal of Science and Research, 3(11): 3127-3134.
18. Ibrahim M.M., Abd-Eladl M. and Abou-Baker N.H. (2015) Lignocellulosic biomass for the preparation of cellulose-based hydrogel and its use for optimizing water resources in agriculture. Journal of Applied Polymer Science 132(42): 42652 (1-12). doi: 10.1002/app.42652
19. Hussein M.M., El-Saady A.M. and Abou-Baker N.H. (2015). Castor bean plants response to phosphorus sources under irrigation by diluted seawater. International Journal of ChemTech Research, 8 (9): 261-271
20. Taha R.A., Hassan M.M., Ibrahim E.A., Abou-Baker N.H. and Shaaban E.A. (2016) Carbon nanotubes impact on date palm in vitro cultures. Plant Cell, Tissue and Organ Culture (PCTOC), 127(2), 525-534, DOI 10.1007/s11240-016-1058-6.



21. Abd-Eladl M., Fouada, S., and Abou-Baker N.H. (2016) Bean yield and soil parameters as response to application of biogas residues and ammonium nitrate under different water requirements. *Egyptian Journal of Soil Science*, 56(2): 313-326.
22. Abou-Baker N.H. and Zaghloul A.M. (2016) Modeling of water stress and fertilization technique in phosphate uptake by corn plants. *International Journal of PharmTech Research*, 9(12):342-351.
23. Hussein M.M., El-Faham S.Y., Abd El-Moti E.Z. and Abou-Baker N.H. (2017) Jojoba irrigated with diluted seawater as affected by ascorbic acid application. *International Journal of Agricultural Research*, 12:1-9.
24. Hashesh W.M., Habib F.M., Wahba M.M., Noufal E.H.A. and Abou-Baker N.H. (2017) Removal of lead from polluted water by using clay minerals. *Zagazig J. Agric. Res.*, 44(6A): 2097-2103.
25. Hamed N. A., Abdel-Aziz R.A. and Abou-Baker N.H. (2017) Effect of some applications on the performance of mandarin trees under soil salinity conditions. *Egypt. J. Hort.* 44(1):141-153. 10.21608/ejoh.2017.1742.1021
26. Abou-Baker N.H., Eman A. Ibrahim and Abd-Eladl M. (2017) Biozeolite for improving bean production under abiotic stress conditions. *Bulletin of the Transilvania University of Braşov Series II: Forestry • Wood Industry • Agricultural Food Engineering* • 10(59):151-170.
27. Abd El-Zaher F.H., Lashein A.M.S. and Abou-Baker N.H. (2018) Application of zeolite as a rhizobial carrier under saline conditions. *Bioscience Research*, 15(2): 1319-1333.
28. Ouis M.A., Abd-Eladl M. and Abou-Baker N.H. (2018) Evaluation of agriglass as an environment friendly slow release fertilizer, *Silicon*, 10: 293-299, doi. 10.1007/s12633-016-9443-7
29. Abou-Baker N.H., Ouis M.A. and Abd-Eladl M. (2018) Appraisal of agriglass in promoting maize production under abiotic stress conditions. *Silicon*, 10,1841-1849. doi.10.1007/s12633-017-9684-0
30. Hussein MM. and Abou-Baker NH. (2018) The contribution of nano-zinc to

alleviate salinity stress on cotton plants. Royal Society open science, 5(8): 171809. 1-11.<http://dx.doi.org/10.1098/rsos.171809>

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