The information is given below in English

السيرة الذاتية

1) البيانات الشخصية:

- **الاسم:** د. جمال عبدالله أحمد أبوبكر أوحيدة
- **الجنسية:** ليبي
- **محل الاقامة:** مدينة سبها - ليبيا
- **مكان الميلاد:** ليبيا – مدينة سبها
- **المؤهل العلمي:** دكتوراه
- **بلد الحصول عليه:** السويد
- **الدرجة العلمية:** أستاذ مشارك
- **التخصص العام:** علوم تربة
- **التخصص الدقيق:** أحياء التربة الدقيقة
- **جهة العمل:** عضو هيئة تدريس بجامعة سبها كلية العلوم – قسم الاحياء الدقيقة
- **رقم الهاتف المحمول:** 00218925139115 - 00218915139115
- **البريد الإلكتروني:** Jam.Abubaker@sebhau.edu.ly Jamal_Abubaker@hotmail.com
- **صفحات الويب الشخصية:**

https://orcid.org/0000-0002-2304-1775
http://scholar.google.com.ly/citations?user=egV1pKYAAAAJ&hl=en
https://www.researchgate.net/profile/Jamal_Abubaker
https://www.webofscience.com/wos/author/record/959208
https://www.scopus.com/authid/detail.uri?authorId=36727091100

2) المؤهلات العلمية:

- **درجة البكالوريوس** في مجال علوم التربة والمياه، قسم التربة والمياه، كلية الزراعة، جامعة سبها– ليبيا (1999-2000)
- **درجة الماجستير** في مجال علوم التربة، قسم التربة، الجامعة السويدية للعلوم الزراعية
- (Swedish University of Agricultural Sciences) (2007)
- **درجة الدكتوراه** في مجال الكائنات الحية الدقيقة في التربة، قسم الميكروبيولوجي، الجامعة السويدية للعلوم الزراعية (Swedish University of Agricultural Sciences) (2012)

3) المهام الإدارية

- عضو في الفريق البحثي التابع لمؤسسة JTI السويدية لدراسة الغازات الحيوية المنبعثة من الترب الزراعية المسمدة بالأسمدة العضوية المختلفة ومدي تأثيرها على البيئة (2008-2011).
- عضو في الفريق البحثي التابع لـ MicroDrive المختص بدراسة وتقييم فاعلية استخدام المخلفات العضوية (المتبقية من إنتاج الغاز الحيوي) في تسميد الترب الزراعية (2008-2011).
- رئيس قسم الاتجاه العام في كلية الزراعة – جامعة سبها -ليبيا (2014- 2017).
- عضو في لجنة الدراسات العليا بقسم التربة والمياه -كلية الزراعة – جامعة سبها -ليبيا (2017 -2018).
- رئيس اللجنة العلمية لجائزة جامعة سبها للتميز في البحث العلمي في اطلالتها الاولى والثانية والثالثة.
- رئيس لجنة متابعة التصنيفات العالمية واستيفاء متطلباتها للجامعة.
- رئيس لجنة منح الموافقة الاخلاقية للبحث العلمي.
- رئاسة العديد من اللجان المشكلة بقرار من رئيس الجامعة لإنجاز مهام علمية وإدارية.
- مدير مركز البحوث والاستشارات العلمية بجامعة سبها حاليا.

4) الأنشطة العلمية والمؤتمرات:

- الأشراف علي جزاء من البحوث الخاصة بطلبة البكالوريوس في الجامعة السويدية (2010-2011).
- المشاركة في المؤتمر العلمي بالدنمارك (Conference Beyond Kyoto) (2009).
- المشاركة في ورشة عمل بعنوان Focus on soils snd water, مكان الانعقاد جامعة SLU السويدية (03-03-2011).
- عضو هيئة تدريس في جامعة سبها / ليبيا –كلية الزراعة – قسم التربة والمياه (2013 - 2018).
- الأشراف على البحوث اللازمة للحصول على درجة البكالوريوس في جامعة سبها –كلية الزراعة – ليبيا (2014-الي الان).
- الأشراف على البحوث اللازمة للحصول على درجة الماجستير في جامعة سبها –كلية العلوم وكلية الزراعة – ليبيا (2020-الي الان).
- مقيم بحوث في المجلات العلمية التالية:

1. African Journal of Agricultural Research (ISSN: 1991-637X)
2. African Journal of Biotechnology (ISSN: 1684-5315)
3. Applied Soil Ecology (ISSN: 0929-1393)
4. Archives of Agronomy and Soil Science (ISSN: 03650340)
5. European Journal of Soil Science (ISSN:1365-2389)
6. Journal of Soil Science and Plant Nutrition (ISSN: 0718-9516)
7. Journal of Soils and Sediments (ISSN: 1614-7480)
8. Peer J (ISSN: 21678359)
9. Scientific African (ISSN: 2468-2276)
10. Soil Science Society of America Journal (ISSN:1435-0661)

11. Waste Management (ISSN: 0956-053X)

12. International journal of recycling organic waste in agriculture (ISSN: 2195-3228)

13. Hindawi – Journal of Nanomaterials (ISSN: 1687-4129)

14. Journal of Agriculture and Food Research (ISSN: 2666-1543)

15. Scientific Reports (ISSN: 2045-2322)

16. Soil and Tillage Research (ISSN: 0167-1987)

17. Soil Use and Management (ISSN:1475-2743)

18. Heliyon (ISSN: 2405-8440)

5) المقررات التي يمكن تدريسها:

ميكروبيولوجي عام – ميكروبيولوجي متقدم - ميكروبيولوجي التربة - ميكروبيولوجي التربة متقدم - علم البكتيريا - المادة العضوية والذبال - خصوبة وتسميد - أساسيات التربة – مقرر طرق البحث العلمي

6) المهارات:

- اللغة الانجليزية (المحادثة – الكتابة - القراء)
- برنامج Microsoft office (Word, Excel, PowerPoint)
- التحليل الاحصائي باستخدام البرامج الاحصائية SPSS – SAS
- برنامج تصميم التجارب Design Experimental Program (MODDE)
- البرنامج المخصص لكتابة وتنسيق المراجع العلمية Endnote
- برنامج اعدد وانشاء الرسومات البيانية SigmaPlot

7) الاهتمامات البحثية:

- دورة النيتروجين في التربة (Mineralization, Immobilization, Nitrification and Denitrification)
- تركيب المجتمعات البكتيرية في التربة Bacterial Community Structure
- انبعاث الغازات الحيوية من التربة -غاز أكسيد النيتروز N_2O وغاز الميثان CH_4
- التسميد بالمخلفات العضوية وتأثيره على النشاط الميكروبي في التربة وعلي نمو وإنتاج المحاصيل
- التسميد بالمخلفات العضوية وتأثيره على انبعاث الغازات الحيوية من التربة
- التسميد الحيوي ودوره في تحسين نمو وإنتاج المحاصيل

8) المنشورات العلمية Publications:

1. Odlare, M., Arthurson, V., Pell, M., Svensson, K., Nehrenheim, E. & **Abubaker, J. 2011**. Land application of organic waste - Effects on the soil ecosystem. ***Applied Energy***, 88, 2210-2218.

2. **Abubaker, J. 2012**. Effects of fertilization with biogas residues on crop yield, soil microbiology and greenhouse gas emissions. Doctoral thesis, ***Acta Universitatis Agriculturae Sueciae*** .p 79.

3. **Abubaker, J.**, Risberg, K. & Pell, M. **2012**. Biogas residues as fertilizers - effects on wheat growth and soil microbial activities. ***Applied Energy***, 99, 126-134.

4. Odlare, M., **Abubaker, J.**, Lindmark, J., Pell, M., Thorin, E. &Nehrenheim, E. **2012**. Emissions of N2O and CH4 from agricultural soils amended with two types of biogas residues. ***Biomass and Bioenergy***, 44, 112-116.

5. Rodhe, L., **Abubaker, J.**, Ascue, J., Nordberg, A. & Pell, M. **2012**. Greenhouse gas emissions from pig slurry during storage and after field application in northern European conditions. ***Biosystems Engineering***, 113, 379-394.

6. **Abubaker, J.**, Cederlund, H., Pell, M. & Arthurson, V. **2013**. Bacterial community structures and microbial activities of different soils amended with biogas residues and cattle slurry. ***Applied Soil Ecology***, 72, 171-180.

7. **Abubaker, J.**, Odlare, M. & Pell, M. **2013**. Nitrous Oxide Production from Soils Amended with Biogas Residues and Cattle Slurry. ***Journal of Environmental Quality***, 42, 1046-1058.

8. Odlare, M., Pell, M., Arthurson, V., **Abubaker, J**. & Nehrenheim, E. **2014**. Combined mineral N and organic waste fertilization - effects on crop growth and soil properties. ***Journal of Agricultural Science***, 152, 134–145.

9. **Abubaker, J.**, Risberg, K., Jönsson, E., Pell, M., Dahlin, S. & Cederlund, H. **2015**. Short-term effects of biogas residue and pig slurry application on soil microbial activity. ***Applied and Environmental Soil Science***, 2015, 15.

10. Elnesairy, N.N.B., **Abubaker, J.**, Mahmod, H., Mukhtar, N. **2016**. The impact of *Bradyrhizobium*, farmyard manure and inorganic nitrogen on growth and yield of guar. ***World Journal of Agricultural Research***, 4, 56-63.

11. **Abubaker, J.**, Elnesairy, N., Ahmed, S. **2017**. Effects of non-digested and anaerobically digested farmyard manures on wheat crop cultivated in desert soil. ***Journal of Aridland Agriculture***, 3, 1-10.

12. El-Zeadani, H., **Abubaker, J.**, Essalem, M., Alghali., A. **2018**. Germination of several wheat cultivars in desert soil after amendment with raw and digested poultry manure with and without combination with mineral fertilizer. ***International Journal of Recycling of Organic Waste in Agriculture***, 7:335-343.

13. **Abubaker, J.**, Ibrahim, N., Alkanami, M., Alaswd, A., El-Zeadani, H. **2020**. Response of winter wheat to the application rate of raw and digested sheep manure alone and supplemented with urea in Libyan desert soil. ***Scientific African***, 8: e00332.

14. **Abubaker, J.**, Essalem, M., El-Zeadani, H., Alghali, A. **2020**. Effect of time interval between sowing and application of nondigested/digested cattle manure on germination of several wheat cultivars and seedling growth in desert soil. ***Agriculture research and technology***, 24: 81-90.

15. **Abubaker, J.,** Alaswd, A., Mohammed, N., El-Zeadani, H., Khalifa, M. **2022**. Alfalfa (*Medicago sativa* L.) growth and yield in desert soil fertilized with raw and anaerobically digested cattle manure. ***Journal of Plant Nutrition***, 45 (7): 992-1003.

16. **Jamal Abubaker**, Nouriya Salah Mohammed, Mohemed Essalem, Abdelsalam Abobaker, Massoudah Khalifa. **2022**. Effect of seed inoculation method with Rhizobium on the germination of alfalfa seeds (*Medicago sativa* L.) ***Journal of Pure & Applied Sciences***, 21 (2), 135 - 140.

8) بحوث في مرحلة الاعداد للنشر Manuscripts:

1. **Jamal Abubaker**. Is C/N ratio regulating mineralization and assimilation of soil nitrogen at application of digestate? – A review (Manuscript)

2. **Abubaker, J**., Alaswd, A., Mohammed, N., Khalifa, M. Effect of raw and anaerobically digested cattle manure on the concentration of protein in vegetative of Alfalfa (*Medicago sativa* L.). (Manuscript)

3. Fatima Abdel-Moatamed, **Jamal Abubaker**, Abdalla Alaswd, Mohemed Essalem, Abdelsalam Abobaker. Wheat growth and productivity in virgin desert soil at combination of biofertilizers with digested and undigested animal manure applied at different time. (Manuscript)

4. **Jamal Abubaker**, Mohemed Essalem, Abdelsalam Abobaker. Alfalfa (*Medicago sativa* L.) seeds germination in Desert soil after sowing at different times from fertilization with raw and digested animal manure (Submitted)

5. **Jamal Abubaker**, Mohemed Essalem, Abdelsalam Abobaker. Alfalfa (*Medicago sativa* L.) seeds germination, growth and yield in desert soil after amended with organic and chemical fertilizers – trail experiment. (Manuscript)

6. Ayiman Abu-Adbah, **Jamal Abubaker**. Detection of coliform bacteria in desert soil amended with undigested and digested animals manure. (Ongoing)

تاريخ اخر تحديث: 2022/06/01

Curriculum Vitae

1) Personal Information

Name: Dr. Jamal Abdallah Ahmed Abubaker

Nationality: Libyan

City: Sebha

Date of Birth: 1976-08-11

Qualifications: Ph.D. **Obtained from** Sweden

Current Position: Associate Professor at Sebha University - Faculty of Science, Depart. Of Microbiology.

Specialization: Soil Microbiology

Keywords: Recycling of organic waste to the soil as fertilizer, nitrous oxide and methane emission, bacteria community structure, soil microbial activity, biofertilizer, organic fertilizers, mineral fertilizers, wheat growth and yield.

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Personal Web Pages:

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https://www.researchgate.net/profile/Jamal_Abubaker

https://publons.com/researcher/1854691/dr-jamal-abdallah-ahmed-abubaker/

https://www.scopus.com/authid/detail.uri?authorId=36727091100

2) Education

1. **2000:** B.Sc. from Faculty of Agriculture, Department of Soil and Water, Sebha University, Libya.
2. **2007:** M.Sc. from Faculty of Natural Resources and Agricultural Sciences, Department of Soil and Environment, Swedish University of Agricultural Sciences
3. **2012:** Ph.D. in biology with specialization in microbiology, Department of Microbiology, Faculty of Natural Resources and Agricultural Sciences, Swedish University of Agricultural Sciences, Sweden.

3) Areas of Interest

My area of interest is the recycling of organic residues as fertilizer to agricultural soils and evaluates their effect on crop production, soil microorganisms, and greenhouse gas emission mainly N_2O and CH_4. I am interested in how organic residues affect soil bacterial community structure and soil microbial activity especially those activities related to the nitrogen cycle. **For more details about my interests please see my publications record, which is listed below.**

4) Courses That Can be Taught

- General microbiology
- Soil microbiology
- Advance general microbiology
- Advance soil microbiology
- Soil biology
- Bacteriology
- Organic matter and humus
- Soil fertility
- Fertilizer management
- Scientific Research Methods

5) Academic Position and Activities

- Member of a research team of (JTI) Swedish Foundation in the project of greenhouse gas emissions from agricultural soils fertilized with various organic residues (2008-2011).
- Member of a research team of (MicroDrive) at Swedish University of Agricultural Sciences in the project of evaluating the effectiveness of using organic residual from biogas production as fertilizer in agricultural soils (2008-2011).
- Teaching the laboratory part of General Microbiology and Soil Microbiology at Swedish University of Agricultural Sciences (2010 - 2011).
- Participation in the supervision of undergraduate students at Swedish University of Agricultural Sciences (2010-2011).
- Participation in the scientific conference in Denmark (Conference Beyond Kyoto) (2009).
- Participation in the workshop entitled Focus on soils and water at Swedish University of Agricultural Sciences (2011).

- Lecturer at Sebha University - Faculty of Agriculture, Department Soil and Water - Libya (2013 - 2018).
- Lecturer at Sebha University - Faculty of Science, Department Microbiology - Libya (2018 – until now).
- Teaching the courses of General Microbiology and soil microbiology, at Sebha University - Faculty of Agriculture - Libya, Department Soil and Water (2013- 2018).
- Teaching advance soil microbiology for postgraduate students at faculty of agriculture – Depart. Soil and Water, Libya (2018 - 2019).
- Teaching advance general microbiology for postgraduate students at faculty of Science – Depart. Of Botany, Libya (2019 – until now).
- Supervision of Undergraduate Researches at Sebha University - Faculty of Agriculture - Libya (2014- 2018).
- Head of the general trend department at the Faculty of Agriculture - Sebha University - Libya (2014- 2017).
- Member of higher education Committee, Soil and Water Department, Faculty of Agriculture, Sebha University (2017- 2018).
- Teaching General Bacteriology Course for undergraduate at Sebha University - Faculty of Science - Libya, Department of Microbiology (2018 - 2019).
- Supervision of undergraduate researches at Sebha University - Faculty of Science and Faculty of Agriculture - Libya.
- Supervision of postgraduate student research at Sebha University - Faculty of Science and Faculty of Agriculture- Libya.
- Director of the research and scientific consultations center of Sebha University – Libya (2018 until now).
- Chairing several committees formed by the President of the University and the Vice-Dean for Academic Affairs at the university to accomplish scientific and administrative tasks (2018 – until now).
- Reviewer in the following journals:

1. African Journal of Agricultural Research (ISSN: 1991-637X)
2. African Journal of Biotechnology (ISSN: 1684-5315)
3. Applied Soil Ecology (ISSN: 0929-1393)
4. Archives of Agronomy and Soil Science (ISSN: 03650340)
5. European Journal of Soil Science (ISSN:1365-2389)

6. Journal of Soil Science and Plant Nutrition (ISSN: 0718-9516)
7. Journal of Soils and Sediments (ISSN: 1614-7480)
8. Peer J (ISSN: 21678359)
9. Scientific African (ISSN: 2468-2276)
10. Soil Science Society of America Journal (ISSN:1435-0661)
11. Waste Management (ISSN: 0956-053X)
12. International journal of recycling organic waste in agriculture (ISSN: 2195-3228)
13. Hindawi - Journal of Nanomaterials (ISSN: 1687-4129)
14. Journal of Agriculture and Food Research (ISSN: 2666-1543)
15. Scientific Reports (ISSN: 2045-2322)
16. Soil and Tillage Research (ISSN: 0167-1987)

6) Skills and Instruments

- Computer skills - Word, Excel, PowerPoint.
- Statistical programs: SAS and SPSS
- Sigma plot software for creating figures, statistical analysis and fitting equation.
- Endnote software for references management.
- MODDE (designing experimental program and modeling).
- Gas chromatography for analyzing N_2O and CH_4.
- Respicond II for measuring soil respiration.
- Flow Injection Analysis instrument for analyzing ammonium and nitrite.
- Terminal restriction fragment length polymorphism (T-RLFP) method for analyzing bacteria community structure in the soils.
- DNA extraction and PCR amplification.
- Sampling and measuring nitrous oxide (N_2O), methane (CH_4) and carbon dioxide (CO_2) emissions at field and lab.
- Measuring soil nitrogen mineralization capacity.
- Measuring soil potential ammonium oxidation activity.
- Measuring soil potential denitrification activity.

7) Publications Record (shown above in pages 4 and 5)

8) Manuscripts (shown above in page 4 and 5)

9) Reference Persons

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Swedish University of Agricultural Sciences
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