

The information is given below in English

السيرة الذاتية



(1) البيانات الشخصية:

- الاسم: د. جمال عبدالله أحمد أبوبكر أوحيدة
- الجنسية: ليبي
- محل الإقامة: مدينة سبها - ليبيا
- تاريخ الميلاد: 11-08-1976
- مكان الميلاد: ليبيا - مدينة سبها
- الحالة الاجتماعية: متزوج
- المؤهل العلمي: دكتوراه
- بلد الحصول عليه: السويد
- الدرجة العلمية: أستاذ مساعد
- التخصص العام: علوم تربة
- التخصص الدقيق: أحياء التربة الدقيقة
- جهة العمل: عضو هيئة تدريس بجامعة سبها كلية العلوم - قسم الاحياء الدقيقة
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https://www.researchgate.net/profile/Jamal_Abubaker

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(2) المؤهلات العلمية المتحصل عليه:

- 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 والأنشطة العلمية والمؤتمرات العلمية:

- عضو في الفريق البحثي التابع لمؤسسة JTI السويدية لدراسة الغازات الحيوية المنبعثة من الترب الزراعية المسمدة بالأسمدة العضوية المختلفة ومدى 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).
- تدريس الجزء العملي لمادة الميكروبيولوجي العام في الجامعة السويدية (2011).
- تدريس الجزء العملي لمادة ميكروبيولوجي التربة في الجامعة السويدية (2010-2011).
- الإشراف على جزء من البحوث الخاصة بطلبة البكالوريوس في الجامعة السويدية (2010-2011).
- المشاركة في المؤتمر العلمي بالبنارك (Conference Beyond Kyoto) (2009).
- المشاركة في ورشة عمل بعنوان Focus on soils and water, مكان الانعقاد جامعة SLU السويدية (2011-03-03).
- عضو هيئة تدريس في جامعة سبها / ليبيا – كلية الزراعة – قسم التربة والمياه (2013 - 2018).
- تدريس مقرر ميكروبيولوجي العام ومقرر ميكروبيولوجي التربة في جامعة سبها كلية الزراعة – ليبيا (2013-2018).
- الإشراف على البحوث اللازمة للحصول على درجة البكالوريوس في جامعة سبها – كلية الزراعة – ليبيا (2014-الي الان).
- 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).
- تدريس مقرر ميكروبيولوجي التربة متقدم لطلبة الدراسات العليا – جامعة سبها ليبيا (2018-2019).
- عضو هيئة تدريس في جامعة سبها / ليبيا – كلية العلوم – قسم الاحياء الدقيقة (2019 – الي الان).
- تدريس مقرر علم البكتيريا في جامعة سبها كلية العلوم – ليبيا (2019- الي الان).
- رئاسة العديد من اللجان المكلفة من رئيس الجامعة او وكيل الشؤون العلمية بالجامعة لإنجاز مهام علمية وإدارية.
- مدير مكتب البحوث والاستشارات العلمية بجامعة سبها (2018-الي الان).
- تحكيم الأوراق العلمية المقدمة للنشر في المجلات التالية:

● African Journal of Agricultural Research

● Applied Soil Ecology

Archives of Agronomy and Soil Science ●

European Journal of Soil Science ●

Journal of Soils and Sediments ●

Soil Science Society of America Journal ●

4) المقررات التي يمكن تدريسها

ميكروبيولوجي عام - ميكروبيولوجي التربة - ميكروبيولوجي التربة متقدم - علم البكتيريا - المادة العضوية والذبال - خصوبة وتسميد - أساسيات التربة

5) المهارات

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

6) 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 وعلو نمو وإنتاج المحاصيل
- التسميد بالمخلفات العضوية وتأثيره على انبعاث الغازات الحيوية من التربة
- التسميد الحيوي ودوره في تحسين نمو وإنتاج المحاصيل

7) الأبحاث والمنشورات العلمية:

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, *Swedish University of Agricultural Sciences*.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.,** Mahmud, 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. 2019. Response of winter wheat to the application rate of raw and digested sheep manure alone and supplemented with urea in Libyan Desert soil (**Submitted**).
14. Essalem, M., **Abubaker, J.**, El-Zeadani, H., Alghali, A. 2019. 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 (**Submitted**).

(7) **بجوث في مرحلة الاعداد للنشر**

1. **Jamal Abubaker**. Is C/N ratio regulate mineralization and assimilation of soil nitrogen at application of digestate – A review (manuscript)?
2. **Jamal Abubaker**, Abdalla Alaswd, Nora Ibrahim, Masouda Khalefah. Response of alfalfa to the application of urea, non-digested and anaerobically digested cattle manure with and without *rhizobium* inoculation.

Curriculum Vitae

1) Personal Information

Name: Dr. Jamal Abdallah Ahmed Abubaker

Nationality: Libyan

City: Sebha

Date of Birth: 1976-08-11

Place of Birth: Sebha City - Libya

Status: Married

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

Current Position: Assistant 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 Page:

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<http://scholar.google.com.ly/citations?user=egV1pKYAAAAJ&hl=en>

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

<https://www.mendeley.com/profiles/dr-jamal-abubaker/>

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 N₂O and CH₄. 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 soil microbiology
- Soil biology
- Bacteriology
- Organic matter and humus
- Soil fertility
- Fertilizer management

5) Academic Position and Activities

- Member of a research team called JTI Swedish Foundation for studying greenhouse gas emissions from agricultural soils fertilized with various organic residues at Swedish University of Agricultural Sciences (2008-2011).
- Member of a research team called (MicroDrive) at Swedish University of Agricultural Sciences for studying and 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 Courses 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).
- Teaching the following courses: General Microbiology, 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 – Libya (2018 - 2019).
- Supervision of Undergraduate Research Students 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 in higher education Committee, Soil and Water Department, Faculty of Agriculture, Sebha University (2017- 2018).
- Teaching General Bacteriology Course at Sebha University - Faculty of Science - Libya, Department of Microbiology (2018 - 2019).
- Supervision of Undergraduate Research Students at Sebha University - Faculty of Science - Department of Botany - Libya (2018 - 2019).
- Director of the research office and scientific consultations of Sebha University – Libya (2018 until now).
- Reviewer of scientific papers in the following journals:
 - African Journal of Agricultural Research
 - Applied Soil Ecology
 - Archives of Agronomy and Soil Science
 - European Journal of Soil Science
 - Journal of Soils and Sediments
 - Soil Science Society of America Journal

6) Skills and Instruments

- Computer skills - Word, Excel, PowerPoint.
- Statistical programs: SAS and SPSS
- Sigmaplot software for creating figures, statistical analysis and fitting equation.
- Endnote software for references management.
- MODDE (designing experimental program and modeling).
- Gas chromatography for analyzing N₂O, CH₄ and CO₂.
- 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 (N₂O), methane (CH₄) and carbon dioxide (CO₂) emissions at field and lab.
- Measuring soil nitrogen mineralization capacity.
- Measuring soil potential ammonium oxidation activity.
- Measuring soil potential denitrification activity.

7) Publications Record

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 fertilisation with biogas residues on crop yield, soil microbiology and greenhouse gas emissions. Doctoral thesis, *Swedish University of Agricultural Sciences*. p 79.

3. **Abubaker, J.**, Risberg, K. & Pell, M. (2012). Biogas residues as fertilisers - 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.**, Mahmud, 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. **2019**. Response of winter wheat to the application rate of raw and digested sheep manure alone and supplemented with urea in Libyan desert soil (**Submitted**).
14. Essalem, M., **Abubaker, J.**, El-Zeadani, H., Alghali., A. **2019**. 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 (**Submitted**).

8) Manuscripts

1. **Jamal Abubaker**. Is C/N ratio regulate mineralization and assimilation of soil nitrogen at application of digestate – A review (manuscript)?
2. **Jamal Abubaker**, Abdalla Alaswd, Nora Ibrahim, Masouda Khalefah. Response of alfalfa to the application of urea, non-digested and anaerobically digested cattle manure with and without rhizobium inoculation.

9) Reference Persons

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Researcher Lena Rodhe

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