# **DAVID KWAW-MENSAH**

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## **EDUCATION**

Ph.D. Agricultural Education – <i>Iowa State University</i>	2008
Ph.D. Minor in Environmental Science – <i>Iowa State University</i>	2008
M.S. Soil Science – <i>Iowa State University</i>	2005
M.S. Land Use Planning – <i>University of Pretoria, South Africa</i>	1996
B.S. Agriculture - Kwame Nkrumah Univ. of Sci. & Tech, Ghana	1982

### PROFESSIONAL EXPERIENCE

### **Assistant Teaching Professor**, (100% teaching)

Effective 2019

Department of Agronomy, Iowa State University

Teach the following courses, Agronomy 512 (Soil-Plant Environment),

Agronomy 532 (Soil Management),

Agronomy 592 (Current Issues in Agronomy)

Agronomy 599M (Creative Component)

## Research Associate/Lecturer in Soil Management

2012-2019

Department of Agronomy, Iowa State University

Coordinated and managed research activities in soil management projects with corn-soybean cropping systems, manage laboratory

and field experiments, collected and analyzed field and laboratory data, wrote reports and prepared manuscripts for publication.

Taught AGRONOMY 532, 512 in fall 2017 and AGRONOMY 601 in spring 2018.

### **Assistant Professor of Practice** (50% Teaching and 50% Research)

Department of Agricultural Leadership Education & Communication

University of Nebraska-Lincoln

2011-2012

Taught undergraduate Ethics course,

Environmental leadership course, and Graduate level

leadership course.

Researched teaching introductory life science courses in

Colleges of Agriculture

### **Graduate Faculty Associate,** Department of Agricultural Leadership,

2008-2011

Education & Communication, University of Nebraska-Lincoln

### **Assistant Extension Educator**

Planned, marketed, and taught farmers and 4-H youth, conducted and evaluated research-based educational programs in food production, corn-soybean cropping systems, natural resources/soil science and 4-H youth development.

## **Adjunct Faculty** (100% Teaching)

Department of Agronomy, Northeast Community College,

2009

Norfolk, Nebraska

Taught AGRI 1280-Crop Chemicals

# **Instructor** – *Iowa Master Gardeners*

2003-2008

# **Extension Administration Internship**

2007

Office of the Provost Cooperative Extension, Iowa State University

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Graduate Assistant (Research and Teaching)	2005-2008	
Department of Agricultural Education and Studies,		
Iowa State University		
Conducted research on perceptions of Extension Educators		
on liquid swine manure use in crop production		
Prepared course syllabus, material and taught "Personal and Profes	ssional	
Leadership in Agriculture" AGEDS 315 Fall 2007 and Spring 2003	8	
Senior Lecturer – University of Fort Hare, South Africa	1997-2002	
Department of Agricultural Extension and Rural Development		
Taught Agricultural Land Use Planning		
Conducted research on agricultural land use systems		
in the former Ciskei in the Eastern Cape of South Africa		
Lecturer - Namibia University of Science & Technology, Namibia	1996–1997	
School of Natural Resource Management & Tourism		
Department of Sustainable Development		
Taught Agriculture, Soil Science, and Chemistry		
Expatriate Science Teacher – Ministry of Education & Sport, Zambia	1989–1995	
Senanga Secondary School, Western Province, Zambia		
Taught Physics and Environmental Science		
Science Teacher – Ministry of Education, Ghana	1987–1989	
Half Assini Secondary School, Western Region, Ghana		
Taught Physics, Chemistry and Biology		
Farm management/Agronomy Internship – Crop Research Institute,	1981	
Aiyinasi, Western Region, Ghana,		
Irrigation Management/Agronomy Internship – Irrigation Company	1980	
of Upper East Region, Ghana		
PROFESSIONAL & COMMUNITY SERVICE		
Reviewer, Soil Science Society of America Journal	2020	
Reviewer, Sustainability (MPDI)	2020-present	
Reviewer, Agriculture (MPDI)	2020-present	
Reviewer, Molecules (MPDI)	2020-present	
Panel Expert, Students' Research Projects	2016-present	
World Food Prize Global Youth Institute, Des Moines, Iowa	•	
Reviewer, African Journal of Food, Agriculture,	2012-present	
Nutrition and Development (AJFAND).	•	
Reviewer, Journal of Agriculture Education and Extension (JAEE)	2010-2015	
Member, University of Fort Hare Research Farm Committee	1997-2002	
Guided and oversaw the management of all research farm operations.		
Member, Land Use Planning Committee, Fort Cox College of Forestry	1997-2002	
and Agriculture. South Africa. Developed and monitored		
the Agricultural Land use plan for the College.		

PROFESSIONAL EXPERIENCE (cont.)

## PROFESSIONAL & COMMUNITY SERVICE (cont.)

- **External Examiner**, Land Use Planning Projects Fort Cox College of Forestry and Agriculture, South Africa
- **Team leader**, Lovedale-Ntselamanzi Community Garden Project 2001–2002
- Member, Land Use Planning Project, Mount Pleasant Community Farm 1999 Adelaide, Eastern Cape South Africa. I did soil pit description and recommended appropriate land use system for the community.
- Member, National Department of Agriculture,

  Directorate of Agricultural Resources Conservation, Pretoria.

  Part of a four-member research team that developed an "annotated database of research in rural livelihoods and agricultural production from 1987 to 1999 in the Former Ciskei and Transkei areas of the Eastern Cape of South Africa."
- Member, Standard Generating and Assessment Task Teams,
  Applied Agriculture and Agricultural Technology,
  Department of Education, Pretoria, South Africa.
- Member, International Thematic Working Group (ITWG) in

  Sustainable Land Use Systems of the Rural Development
  Information, Republic of South Africa through Telematics
  (RDISAT) Project. An international co-operation between
  Institutions of Higher Agricultural Learning in South Africa,
  Wageningen Agricultural University (WAU) and
  The International Institute for Aerospace Survey and
  Earth Sciences (ITC), The Netherlands.

### **REFEREED PUBLICATIONS**

- Hao, X.X., Han, X. Z., Zou, W. X., Wang, S. Y., and Kwaw-Mensah, D. 2020. Changes in soil organic and its fractions after 13 years of continuous straw return in a soybean-maize cropping system. Applied Ecology and Environmental Research 18 (6): 8267-8284.
- Lu, X.C., Han, X. Z., Chen, X., Yan, Y., You, M. Y., **Kwaw-Mensah, D**., Hao, X.X., Zou, W. X. 2020. Changes of soil phosphorus fractions in parent material of a mollisol at the early pedogenic stage in northeast China. **Applied Ecology and Environmental Research** 18(2): 2935-2948.
- Mahdi M. Al-Kaisi, and **David Kwaw-Mensah.** 2020. Quantifying Soil Carbon Change in a long-term tillage and crop rotation study across Iowa Landscapes. Soil Sci. Soc. Am. J. 2020:1-21.
- Mahdi M. Al-Kaisi, **David Kwaw-Mensah** and En CI. 2017. Effect of nitrogen fertilizer application on corn residue decomposition in Iowa. **Agronomy Journal** 109 (5):1-13. doi:10.2134/agronj201611.0633.
- Mahdi Al-Kaisi, Sotirios V. Archontoulis and **David Kwaw-Mensah**. 2016. Soybean spatiotemporal yield and economic variability as affected by tillage and crop rotation. **Agronomy Journal** 108:1-14.
- Mahdi M. Al-Kaisi, Sotirios V. Archontoulis, **David Kwaw-Mensah**, and Fernando Miguez. 2015. Tillage and crop rotation effects on corn agronomic response and economic return at seven Iowa locations. **Agronomy Journal** 107:1411-1424.
- Mahdi Al-Kaisi, Roger Elmore, Gerald A. Miller and **David Kwaw-Mensah**. 2015. Extension agriculture and natural resources in the U.S. Midwest: A review and analysis of challenges and future opportunities. **Natural Sciences Education Journal** 44:26-33. Doi:10.4195/nse2014.10.0022.

### **REFEREED PUBLICATIONS (cont.)**

- Al-Kaisi, M. M., A. Douelle, and **David Kwaw-Mensah**. 2014. Water Stability of soil micro and macro aggregates under different tillage systems. **Soil and Water Conservation Journal** 69:563-569.
- **David Kwaw-Mensah** and Robert A. Martin. 2013. Perceptions regarding selected educational strategies used by Extension Educators. **Journal of Agricultural Education and Extension** 19:395-406.
- Camara, M., Martin, R. A. and **David Kwaw-Mensah**, 2009. Water quality issues in the North Central region of the United States: A Teaching-Learning model. **Journal of Sustainable Agriculture** 33:285-302.
- Al-Kaisi, Mahdi, and **David Kwaw-Mensah**. 2007. Effect of tillage and nitrogen rate on corn yield and nitrogen and phosphorus uptake in a corn-soybean rotation. **Agronomy Journal** 99:1548-1558.
- **David Kwaw-Mensah** and Mahdi Al-Kaisi. 2006. Tillage and nitrogen source and rate effects on corn response in corn-soybean rotation. **Agronomy Journal** 98:507-513.
- **David Kwaw-Mensah,** Laker, M and Belete, A. 2000. Contributions of farming systems research to sustainable agriculture in Africa: An example from Zambia. **The Land** 4.1:3-14.

### SELECTED CONFERENCE PROCEEDINGS AND ABSTRACTS

- Mahdi Al-Kaisi and **David Kwaw-Mensah**. 2018. Long-term tillage and crop rotation effects on yield, economic returns, and soil organic carbon in Iowa. Proceedings of the 30<sup>th</sup> Annual Integrated Crop Management Conference, November 28-29, 2018. Iowa State University, Ames Iowa. p. 141-158.
- Mahdi Al-Kaisi, **David Kwaw-Mensah** and Sotirios Archontoulis. 2016. Long-term tillage and crop rotation effects on soil, yield and economic returns. **Proceedings of the 28th Annual Integrated Crop Management Conference,** November 30-December 1, 2016. Iowa State University, Ames Iowa. p. 157-177.
- Mahdi Al-Kaisi and **David Kwaw-Mensah**. 2018. Long-term tillage and crop rotation effects on yield, economic returns, and soil organic carbon in Iowa. **Proceedings of the 30**<sup>th</sup> **Annual Integrated Crop Management Conference,** November 28-29, 2018. Iowa State University, Ames Iowa. p. 141-158. November 28-29, 2012. Iowa State University, Ames, IA, USA. p. 163-167.
- Mahdi Al-Kaisi, **David Kwaw-Mensah**, and Guzman, J. 2012. Conservation Systems: Benefits in managing drought and mitigating yield loss by improving soil quality. **Proceedings of the 24<sup>th</sup> Annual Integrated Crop Management Conference**,
- Batts, A., Martin, R., Vikram, K. & **David Kwaw-Mensah**. 2009. A framework for agricultural awareness and literacy. **The Proceedings of the American Association for Agricultural Education**, Louisville, KY, USA.
- Mahdi Al-Kaisi and **David Kwaw-Mensah**. 2014. Effect of nitrogen on corn residue decomposition. Abstract. **ASA, CSSA and SSSA International Annual meeting,** Long Beach, CA, USA. November 2-4, 2014.

### EXTENSION AND POPULAR PRESS ARTICLES

- Mahdi Al-Kaisi and **David Kwaw-Mensah**. 2016. Iowa Soil Health Field Guide. CROP 3089A. **Iowa State University Extension and Outreach**, Ames, IA, USA.
- Mahdi Al-Kaisi and **David Kwaw-Mensah**. 2016. Iowa Soil Health Management Manual. CROP 3090. **Iowa State University Extension and Outreach**, Ames, IA. USA.
- Mahdi Al-Kaisi and **David Kwaw-Mensah**. 2016. Building Soil Health. 3090B July 2016. Iowa State University Extension and Outreach, Ames, IA, USA.
- **David Kwaw-Mensah,** M., A. Licht, and M. M. Al-Kaisi. March 15, 2004. Manure sampling, calibration and application. **Hub and Spokes Newsletter, Iowa State University**, Ames, IA, USA.

### SELECTED POSTERS AND PRESENTATIONS

- Mahdi Al-Kaisi and **David Kwaw-Mensah**. 2017. Effect of nitrogen application on corn residue decomposition in Iowa. **Soil Health Conference, Iowa State University**, Ames, IA, USA. February 16-17, 2017. (Poster)
- Mahdi Al-Kaisi, **David Kwaw-Mensah** and Ohene Akuoko. 2016. Building soil Health for sustainable agriculture. Abstract. **First Inaugural Soil Health Conference, Iowa State University,** Ames, IA, USA. February 2-3, 2016. (Poster)
- **David Kwaw-Mensah,** M. A. Licht and M. M. Al-Kaisi. June 1, 2004. In-season nitrate evaluation for manured corn. Hub and Spokes **Newsletter, Iowa State University,** Ames, IA, USA.
- Licht, M. A., **David Kwaw-Mensah** and M. M. Al-Kaisi. June 1, 2004. Soil compaction: Impacts for manure application. Hub and Spokes **Newsletter**, **Iowa State University**, Ames, IA, USA.
- David Kwaw-Mensah, M. Al-Kaisi and M. A. Licht. 2004. Effects of tillage and N source and water extraction in corn. North Central American Society of Agronomy Conference. Moline, IL. USA. (Poster)
- **David Kwaw-Mensah**, M. Al-Kaisi and M. A. Licht. 2003. Effect of integrated tillage and nutrient management on N and water use efficiency in corn. **American Society of Agronomy Conference.** Denver, CO. USA. (Poster)
- **David Kwaw-Mensah**. 2000. The role of higher education in agricultural development in Africa. **Purdue University, West Lafayette, IN**, USA. (Presenter)
- **David Kwaw-Mensah**, 2000. Some aspects of crop production in Africa: An example from Zambia. **Agronomy Department Seminar, Iowa State University,** Ames, IA. USA.
- **David Kwaw-Mensah,** 1996. Causes of low agricultural productivity in the Senanga District of Zambia. **Institute for Soil, Climate and Water,** Pretoria, South Africa. (Presenter)

### **AWARDS AND HONORS**

Center for Excellence in Learning & Teaching (CELT) Certificate of Achievement	
Iowa State University	2019
PhD Research and Dissertation Excellence Award, <i>Iowa State University</i>	2008
Best Lecturer of the Year Award, University of Fort Hare, South Africa	2002
Fellow, International Higher Education Loan Program (I-HELP)	2000
Iowa State University	

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# PROFESSIONAL ASSOCIATION AFFILIATIONS

American Society of Agronomy (ASA) American Association for Agricultural Education (AAAE) Association for International Agricultural and Extension Education (AIAEE) Agronomists, Soil Scientists, Plant Breeders and Extension Specialists

Soil Science Education

International Union of Soil Science (IUSS)

Sustainable Agriculture