

Adam H. Sparks

experience

- 2016–Present **University of Southern Queensland** Toowoomba, QLD, Australia Associate Professor
Conduct research with the Centre for Crop Health to help farmers address disease problems with summer crops in QLD and NSW
- 2012–2015 **International Rice Research Institute** Los Baños, Philippines Scientist I
Develop tools and strategies for farmers to use in addressing rice diseases
- 2011–2012 **International Rice Research Institute** Los Baños, Philippines Post-Doctoral Fellow
Linked botanic epidemiology models to GIS tools for mapping model output
- 2009–2010 **Kansas State University**, Manhattan, KS, USA Post-Doctoral Research Associate
Developed and refined predictive Fusarium head blight models for wheat
<http://www.wheatcab.psu.edu/>
- 2002–2004 **University of Nebraska-Lincoln**, Lincoln, NE, USA Research Technologist
Managed maize and soybean plant pathology extension field research
- 2000–2003 **University of Nebraska-Lincoln**, Clay Center, NE, USA Research Technician
Managed maize and sorghum plant pathology extension field research
- 1999–2000 **Purdue University**, West Lafayette, IN, USA Assistant Director
Coordinated training events for Purdue Diagnostic Training and Research Center
- 1997–1999 **Purdue University**, West Lafayette, IN, USA Research Technician
Managed soybean and canola production research studies

education

- 2009 **Ph.D. Plant Pathology** Kansas State University, Manhattan, KS, USA
Epidemiology and Ecology of Plant Pathogens
Dissertation: *Disease risk mapping with metamodels for coarse resolution predictors: global potato late blight risk now and under future climate conditions*
- 2007 **Post Graduate Certificate** Geography Kansas State University, Manhattan, KS, USA
Geographic Information Science
- 2000 **B.Sc. Agronomy** Purdue University, West Lafayette, IN, USA
Soil and Crop Management

selected publications

Previous Five Years

- Spatial modelling of rice yield losses in Tanzania due to bacterial blight and leaf blast in a changing climate
Confidence D, A H Sparks, S Zwart
Climatic Change (Accepted 2015)
- Decision tools for bacterial blight resistance gene deployment in rice-based agricultural ecosystems
S G Dossa, A H Sparks, C M Vera Cruz, R Oliva
Frontiers in Plant Science 6.305 (2015). DOI: 10.3389/fpls.2015.00305

contact

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Adam H. Sparks 🌐
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skills

GIS
modelling
agricultural statistics

Farmers' preference for rice traits: Insights from farm surveys in Central Luzon, Philippines, 1966–2012

A G Laborte, N C Paguirigan, P F Moya, A Nelson, A H Sparks, G B Gregorio
PLOS ONE e0136562 (Aug. 2015). DOI: DOI:10.1371/journal.pone.0136562

Climate change may have limited effect on global risk of potato late blight

A H Sparks, G A Forbes, R J Hijmans, K A Garrett
Global Change Biology 20 (2014) pp. 3621–3631. DOI: 10.1094/PDIS-04-11-031

A review on crop losses, epidemiology and disease management of rice brown spot to identify research priorities and knowledge gaps

M K Barnwal, A Kotasthane, N Magculia, P K Mukherjee, S Savary, A K Sharma, H B Singh, U S Singh, A H Sparks, M Variar, N Zaidi
European Journal of Plant Pathology 136.3 (2013) pp. 443–457. DOI: 10.1007/s10658-013-0195-6

Complexity in climate-change impacts: an analytical framework for effects mediated by plant disease

K A Garrett, G A Forbes, S Savary, P Skelsey, A H Sparks, C Valdivia, A H C van Bruggen, L Willocquet, A Djurle, E Duveiller, H Eckersten, S Pande, C Vera Cruz, J Yuen
Plant Pathology 60.1 (2011) pp. 15–30. DOI: 10.1111/j.1365-3059.2010.02409.x

International agricultural research tackling the effects of global and climate changes on plant diseases in the developing world

Serge Savary, Andrew Nelson, Adam H. Sparks, Laetitia Willocquet, Etienne Duveiller, George Mahuku, Greg Forbes, Karen A. Garrett, David Hodson, Jon Padgham, Suresh Pande, Mamta Sharma, Jonathan Yuen, Annika Djurle
Plant Disease 95.10 (2011) pp. 1204–1216. Scientific Societies. DOI: 10.1094/PDIS-04-11-0316

A metamodeling framework for extending the application domain of process-based ecological models

A H Sparks, G A Forbes, R J Hijmans, K A Garrett
Ecosphere 2.8 (2011) art90. DOI: 10.1890/ES11-00128.1

service to profession

currently reviewing for

Global Change Biology
European Journal of Plant Pathology
Climatic Change
Food and Energy Security

organizational service

2014–2015 Crop and Environmental Sciences Division Seminar Committee Chair

2015 IRRI OCS Advisory Group Member

professional certifications

PRINCE2 Foundation (2014) candidate number: P2R/009385 – HiLogic Pty Ltd.

professional affiliations

Australasian Plant Pathology Society (APPS)
American Phytopathological Society (APS)
International Society for Plant Pathology (ISPP)