# Adam H. Sparks

### **Professional Profile**

- Wide ranging career demonstrating consistent success both in an non-profit international NGO and academia.
- Experience in conceptualising projects through successful grant applications, project management and attaining desired results.
- Extensive background of experiences in working with diverse partners.
- Broad experience in effective communication ranging from peer-reviewed journal articles to extension presentations and popular press.

#### contact

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### skills

GIS modelling R programming

# **Experience**

2016-Preser	t <b>University of Southern Queensland</b> Toowoomba, Queensland, AUS	Associate Professor
2012–2015	International Rice Research Institute Los Baños, Laguna, PHL	Scientist I
2011–2012	International Rice Research Institute Los Baños, Laguna, PHL	Post-Doctoral Fellow
2009–2010	<b>Kansas State University</b> Manhattan, Kansas, USA	Post-Doctoral Research Associate
2002–2004	University of Nebraska-Lincoln Lincoln, Nebraska, USA	Research Technologist
2000–2003	<b>University of Nebraska-Lincoln</b> Clay Center, Nebraska, USA	Research Technician
1999–2000	<b>Purdue University</b> West Lafayette, Indiana, USA	Assistant Director
1997–1999	Purdue University West Lafayette, Indiana, USA	Research Technician

## **Education**

2009	<b>Ph.D.</b> Plant Pathology	Kansas State University, USA
	Epidemiology and Ecology of Plant Pathogens	5
	<b>Dissertation:</b> 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 Geographic Information Science	Kansas State University, USA
2000	B.Sc. Agronomy Soil and Crop Management	Purdue University, USA

### Selected Publications

#### **Previous Five Years**

Evaluation of the 'Irish Rules': The potato late blight forecasting model and its operational use in the Republic of Ireland

M. Čučak, A. Sparks, de Andrade R. M. S. Kildea, K. Lambkin, R. Fealy

Agronomy 9.9 (2019) p. 515. Multidisciplinary Digital Publishing Institute. DOI: 10.3390/agronomy9090515

'hagis', an R package resource for pathotype analysis of Phytophthora sojae populations causing stem and root rot of soybean

A. G. McCoy, Z. A. Noel, A. H. Sparks, M. I. Chilvers

Molecular Plant-Microbe Interactions ja (2019). Am Phytopath Society. DOI: 10.1094/MPMI-07-19-0180-A

#### Concepts, approaches, and avenues for modelling crop health and crop losses

S. Savary, A. D. Nelson, A. Djurle, P. D. Esker, A. Sparks, L. Amorim, A. Bergamin Filho, T. Caffi, N. Castilla, K. Garrett, N. McRoberts, V. Rossi, J. Yuen, L. Willocquet

European Journal of Agronomy 100 (Oct. 2018) pp. 4-18. Elsevier. DOI: 10.1016/j.eja.2018.04.003

#### nasapower: A NASA POWER Global Meteorology, Surface Solar Energy and Climatology Data Client for R

A. H. Sparks

Journal of Open Source Software 3 (Oct. 2018) p. 1035

#### Crop health and its global impacts on the components of food security

S. Savary, S. Bregaglio, L. Willocquet, D. Gustafson, D. Mason D'Croz, A. Sparks, N. Castilla, A. Djurle, C. Allinne, M. Sharma, V. Rossi, L. Amorim, A. Bergamin, J. Yuen, P. Esker, N. McRoberts, J. Avelino, E. Duveiller, J. Koo, K. Garrett

Food Security 9.2 (Apr. 2017) pp. 311-327. Springer Nature. DOI: 10.1007/s12571-017-0659-1

#### getCRUCLdata: Use and Explore CRU CL v. 2.0 Climatology Elements in R

A. H. Sparks

The Journal of Open Source Software 2.12 (Apr. 2017). The Open Journal. DOI: 10.21105/joss.00230

#### GSODR: Global Summary Daily Weather Data in R

A. H. Sparks, T. Hengl, A. Nelson

The Journal of Open Source Software 2.10 (Feb. 2017). The Open Journal. DOI: 10.21105/joss.00177

#### bomrang: Fetch Australian Government Bureau of Meteorology Weather Data

A. H. Sparks, M. Padgham, H. Parsonage, K. Pembleton

The Journal of Open Source Software 2.17 (Sept. 2017). The Open Journal. DOI: 10.21105/joss.00411

# Spatial modelling of rice yield losses in Tanzania due to bacterial leaf blight and leaf blast in a changing climate

C. Duku, A. H. Sparks, S. J. Zwart

Climatic Change 135.3-4 (Jan. 2016) pp. 569-583. Springer Nature. DOI: 10.1007/s10584-015-1580-2

# Decision tools for bacterial blight resistance gene deployment in rice-based agricultural ecosystems

G. S. Dossa, A. Sparks, C. Vera Cruz, R. Oliva

Frontiers in Plant Science 6.305 (May 2015). Frontiers Media SA. DOI: 10.3389/fpls.2015.00305

# 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 10.8 (Aug. 2015) e0136562. Public Library of Science (PLoS). DOI: 10.1371/journal.pone.0136562