

# Adam H. Sparks

## professional profile

- Wide ranging career demonstrating consistent success both in a 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

Centre for Crop Health  
University of Southern  
Queensland  
Toowoomba QLD 4350  
Australia  
adam.sparks@usq.edu.au  
+61 (4) 1548 9422  
adam.h.sparks

## web

adamhsparks.github.io  
0000-0002-0061-8359  
Adam H. Sparks  
@adamhsparks  
adamhsparks

## skills

GIS  
modelling  
R programming

## experience

2016–Present	<b>University of Southern Queensland</b> Toowoomba, Queensland, AUS	Associate Professor
2012–2015	<b>International Rice Research Institute</b> Los Baños, Laguna, PHL	Scientist I
2011–2012	<b>International Rice Research Institute</b> Los Baños, Laguna, PHL	Post-Doctoral Fellow
2009–2010	<b>Kansas State University</b> Manhattan, Kansas, USA	Post-Doctoral Research Associate
2002–2004	<b>University of Nebraska-Lincoln</b> 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	<b>Purdue University</b> West Lafayette, Indiana, USA	Research Technician

## education

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

## selected publications

### previous five years

#### 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

*European Journal of Agronomy* (2018). *Elsevier*

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

Adam H. Sparks

*Journal of Open Source Software* 3 (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

#### Philippine Rice Information System (PRISM): innovating the rice field data capture and monitoring using smartphone

J. M. Maloon, E. J. P. Quilang, M. R. O. Mabalay, J. L. Dios, A. C. Arocena Jr. J. R. F. Mirandilla, P. A. Mabalot, M. I. Barroga, R. T. Dollontas, G. C. Peralta, G. Mesa, B. T. Salazar, G. D. Balleras, N. B. Detoito, G. Arida, D. K. M. Donayre, E. C. Martin, G. F. Estoy, A. Nelson, A. Sparks, J. V. Raviz, A. G. Laborte, T. O. Setiyono, A. A. Maunahan, A. B. Rala, J. E. Villa, N. P. Castilla, Z. M. Bhatti, D. D. Maco, R. S. Bayot, M. Barbierri

*Philippine Journal of Crop Science* (2015)

#### 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* 20.12 (May 2014) pp. 3621–3631. *Wiley-Blackwell*. DOI: 10.1111/gcb.12587

#### 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 (Mar. 2013) pp. 443–457. Springer Nature. DOI: 10.1007/s10658-013-0195-6