

# 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

## Publications

### Invited Talks

- |      |  |
|------|--|
| 2018 | <b>Upscaling models, downscaling data or the right model for the right scale of application?</b><br>2018 International Congress of Plant Pathology<br>Boston, Massachusetts, USA   |
| 2016 | <b>Using modelling and mapping for digital insights into diseases in the rice field</b><br>2016 Korean Society of Plant Pathology Fall Meeting and International Conference<br>Seoul National University<br>Pyeongchang, Gangwon-do, Korea             |
| 2014 | <b>Taking cloud crop protection from the field to the cloud</b><br>4th International Rice Congress (IRC2014)<br>Bangkok, Thailand  |
| 2014 | <b>Impact of climate change on rice diseases</b><br>Workshop on the impact of climate change on crop pests and diseases, and adaptation strategies for the Greater Mekong Sub - Region (GMS)<br>Hotel Continental Saigon,<br>Ho Chi Minh City, Vietnam |
| 2014 | <b>Epidemiology and Disease Management of rice brown spot: Research priorities and knowledge gaps</b><br>66th Annual Indian Phytopathological Society Meeting<br>Indira Gandhi Krishi Vishwavidyalaya University,<br>Raipur, India                     |
| 2013 | <b>Biosecurity risks in Southeast Asia impacting on human food supplies</b><br>Pacific Environmental Security Forum<br>Australian Department of Defence (ADoD) and U. S. Pacific Command (US-PACOM)<br>Sydney, New South Wales, Australia              |
| 2010 | <b>Global potato late blight risk in response to climate change, possible futures for a historic disease</b><br>Emerging infectious diseases in response to climate change.<br>New York Academy of Sciences,<br>New York, New York, USA                |

### Doctoral Dissertation Mentorship

- |         |  |
|---------|--|
| Current | <b>Mladen Cucak</b> (Collaborator) <span style="float: right;">Maynooth University/TEAGASC, IRL</span><br>Can we still use 'Irish Rules' to forecast development of potato late blight epidemics in Ireland?   |
| Current | <b>Charles T. Gray</b> (Collaborator) <span style="float: right;">La Trobe University, AUS</span><br>Statistical Meta-research   |
| 2016    | <b>Sith Jaisong</b> (Principal Supervisor) <span style="float: right;">University of the Philippines, Los Baños, PHL</span><br>Network analysis of rice crop health survey data for characterization of yield reducing factors of tropical rice ecosystems in south and southeast Asia |

## Master's Thesis Mentorship

2017	<b>Patrick Kiplimo Toroitich</b> (Collaborator)	Strathmore University, KEN
	A model for early detection of potato late blight disease: A case study in Nakuru County	
2016	<b>Jerico Bigornia</b> (Principal Supervisor)	University of the Philippines, Los Baños, PHL
	Environmental performance of water saving technologies for irrigated low-land rice production	

## Extramural Support

2017	<b>USQ Research Infrastructure Program 2017</b>	AUD 25000
	PIs: D. Adorada, A. Sparks, A. Young	
2016-2019	<b>EPIC</b> (Developing Ecologically-based Participatory IPM package for rice in Cambodia)	USD 2.2 million
	PIs: B. Hadi (IRRI), A. Sparks, V. Kumar (IRRI), A. Stuart (IRRI), R. Oliva (IRRI), I.R. Choi (IRRI)	
2016-2019	<b>Syngenta-IRRI Scientific Knowledge and Exchange Program</b>	USD 484,274
	Phase III, Sub-Project 1 - Crop Health Management PIs: A. Sparks (IRRI) and K. K. Fui (Syngenta)	
2015-2017	<b>Identifying resistant rice germplasm to false smut using combined screening approaches and understanding the mechanisms underlying rice resistance</b>	USD 653,914
	Epidemiology and environmental characterisation of false smut, PIs: B. Zhou (IRRI), C. M. Vera Cruz (IRRI) and A. Sparks (IRRI)	
2013-2017	<b>PRISM</b> (Philippine Rice Information System)	USD 2.8 million
	Component B - Crop Health Monitoring, PIs: A. Nelson (IRRI), A. Sparks (IRRI), G. S. Arida (PhilRice), E. J. P. Quilang (PhilRice)	
2013-2015	<b>Syngenta-IRRI Scientific Knowledge and Exchange Program</b>	USD 454,640
	Phase II, Sub-Project 2 - Crop Health Management PI: A. Sparks (IRRI) and K. K. Fui (Syngenta)	

## Awards

2016	<b>GovHack 2016 First Place Award for Paddock to Plate Category, John Conner Hack</b>
	As part of the Toowoomba Trio with K Pembleton and G Grundy

## Professional Affiliations

Australasian Plant Pathology Society (APPS)

American Phytopathological Society (APS)

International Society for Plant Pathology (ISPP)

## Professional Service

Co-founder Open Plant Pathology

Section Editor Tropical Plant Pathology

Member Australia National Plant Biosecurity Diagnostic Network

Member ExtensionAUS Field Crop Diseases Community of Practice

Member International Congress of Plant Pathology (ICPP) Epidemiology Committee