



1. Personal Data

Name: Dr. Jonah Kiprono Birgen

Title/Qualifications: Lecturer with Doctor of Philosophy

a) Academic

- (i) 2006: Doctor of Philosophy in Plant Pathology (Ph.D) Kenyatta University.
Thesis title: Postharvest diseases of tomatoes in Kenya and their control by use of antagonistic organisms.
- (ii) 1988: M.Phil In Mycology and Plant Pathology – University of London and DIC Imperial College. Thesis title: Growth of *Fusarium solani* var *coeruleum* in the rhizosphere of potato, barley and broad bean.
- (iii) 1985: MSc in Mycology, University of Nairobi. Thesis title: Studies into the Pathology and Biology of Postharvest fungi of tomato fruits.
- (iv) 1979: B.Ed (science) Second Class Hon. Upper Division, University of Nairobi. Studied Botany, Zoology, Education.

b) Professional Courses

- (i) April 1st – 7th 2007: VicRes project proposal writing workshop held at Jinja Nile Resort, Uganda.
- (ii) Dec 1997 – Jan 1998: Training course on Plant and Animal Disease Diagnosis

<p>and Finger-Printing Plant Genotypes held at University of Nairobi and KARI.</p> <p>(iii) 1995: MSDN Bioinformatics Training Workshop held at National Museums of Kenya.</p> <p>(iv) 1987: Developing your skills as a lecturer (DYSAL) training at the University Of Sheffield, UK.</p> <p>(v) 1984: Training course on the techniques for the culture and conservation of microorganisms held at University of Nairobi.</p>
Department/Unit/Section: Department of Plant Science
Contact Address: Department of Plant Science Kenyatta University P.O. Box 43844 Nairobi Telephone: 810901 Ext. 57177 Cell phone: 0722479637
Position: Lecturer
Area of Specialization: Plant Pathology and Mycology
Research Interests: : Economic significance of fungi Fungal plant diseases Post harvest pathology of perishable farm produce

2. Conference Presentations

S/No	Presenter	Title of Paper presented	City/Country	Date of Conference	Funding (US\$)
1	Birgen J.K	Effects of stage of Maturity on susceptibility of tomato fruits to fungal pathogens	Nairobi, Kenya	16th to 19th March	None
2	Birgen, J.K, Cheruiyot, R.C, Omollo, J.F	The effects of some biotic agents on rice field weeds	Nairobi, Kenya	1983	None

3. Research

S/ No	Researcher	Year	Title	Donor	Funding (US\$)
1	Dr. Birgen J.k. Dr. Alex Machocho Dr.	2007-2010	Enhancing Intergrated Pest and Diseaeses Management	VicRes	USD 150000

	Constancia Rugumamu Mr. Omari Amuka Ms. Ellen Asiimue		Strategies in the production of Green Gram in parts of Lake Victoria Basin		
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4. Funded projects

S/ No	Researcher	Year	Title	Granting Body	Funding (US\$)
1	Dr. Birgen J.k. Dr. Alex Machocho Dr. Constancia Rugumamu Mr. Omari Amuka Ms. Ellen Asiimue	2007-2010	Enhancing Intergrated Pest and Diseaeses Management Strategies in the production of Green Gram in parts of Lake Victoria Basin	VicRes	USD 150000
2	GM Kariuki, FW Kariuki, JK Birgen, V Gathaara	2010	Participatory development , testing and validation of concepts and technologies for site-specific detection and control of plant parasitic nematodes infecting tomatoes in Mwea, Kenya	RUFORUM	

5. Publications

S/No	Author	Year	Title	Journal	ISBN/ISSN Reference No.
1	Kimaru S.K, Birgen J.K, Waudu S.W E. Monda	2004	Effects on Neem Kernel cake powder (NKCP) on <i>Fusarium</i> wilt of tomato when used as soil amendment	Journal of Agricultural and Rural Development in the tropics and subtropics	105: 63-69
2	Birgen J.K, Siboe G.M	1982	Leaf- blotch and fruit rot of pomegranate	Plant protection bulletin FAO	30: 161-162
3	AK Machocho, CP Rugumamu, JK Birgen, O Amuka, E Asimwe, JA Orwa, C Mbakaya, J Obua, S Okoth	2012	The status of green gram production, pest and disease management in parts of Lake Victoria basin	Inter-University Council for East Africa Lake Victoria Research Initiative	81-90
4	JW Kibunja, JK Birgen, GM Kariuki, DL Coyne	2014	The use of <i>Trichoderma</i> spp. Alongside resistant tomato varieties for root-knot nematode management under field conditions in coastal Kenya	Journal of Nematology	46:(2):188
5	Elizabeth Awuor Ouna, J Birgen, S Ekesi	2011	Entomopathogenicity of hyphomycete fungi to fruit fly <i>Bactrocera invadens</i> (Diptera Tephridae) and their potential biological control on mango	RUFORUM	355-359
6	Wendot, P.K. Kariuki, G.M. Kariuki,	2012	Towards Development of Site Specific Technologies for Identification of Fields Infested with Root-knot Nematodes (RKN) under Tomato Cropping	RUFORUM	1653-1656

	F.W. Birgen, J.K. Njue, A. Ngundo, G.W		System in Mwea, Kenya		
7	<u>Ngundo,</u> <u>G.W.</u> <u>Kariuki,</u> <u>G.M.</u> <u>Kariuki,</u> <u>F.W.</u> <u>Birgen,</u> <u>J.K.</u>	2012	Evaluation of Root- knot Nematode Management Strategies Based on their Distribution in Tomato Fields in Mwea, Kenya	RUFORUM	1667-1671
8	Birgen, J.K.	2017	Effects of stages of maturity on the susceptibility of tomato fruits to postharvest fungal pathogens	International Journal of Plant and Animal Sciences	Vol 5 (1) : 140-147
9	Birgen, J.K. Mugo, D.N.	2017	Inhibitory effects of Fungicides and Neem Kernel Cake Powder on mycelial growth of <i>Fusarium oxysporum</i> . sp. <i>lycopersici</i>	International Journal of Plant and Animal Sciences	
10	Birgen, J.K.	2017	Postharvest fungi and diseases of tomato fruits in selected markets in Kenya	International Journal of Plant and Animal Sciences	

6. Consultancy and community service

S/No.	Consultant (s)	Consulting Person/ Body/ Organization	Year	Title Consultancy Service	Payment (US\$)
1	Board Member	Moi Sitotwet Secondary School	2005- Current	Board Member	
2	Patron	Kericho County University Students Association	2013- Current	Patron	

7. Affiliation to Professional Bodies

S/No	Name of professional body
1	Kenya society of microbiology and biotechnology

8. Supervision of postgraduate students

S/No	Name of student	Thesis title	Status of project(e.g.Fiest year etc)
1	David Ondigo Ojwang	A taxonomic survey of Postharvest fungi on horticultural crops in Kenya	Completed (MSc 1996)
2	Kirugo Stanley	Efficacy of Neem Kernel Cake Powder against <i>Fusarium</i> Wilt of Tomato	Completed (MSc 1999)
3	Elizabeth Ouna	Entomopathogenicity of Hyphomycete fungi to fruit fly <i>Bactrocera invadens</i> (Diptera: Tephritidae) and their potential for biological control on Mango	Completed (MSc 2010)
4	D. N. Mugo	Intergrated Management of <i>Fusarium</i> Wilt of Tomato using fungicides, organic matter and neem extract	Completed (MSc 2012)
5	JA Odhiambo	Isolation and identification of pathogenic and spoilage bacteria and fungi in preserved crustacea and fish sold in Mombasa, Kenya	Completed (MSc 2012)
6	Wendot, P.K.	Towards Development of Site Specific	Completed (MSc. 2014)

		Technologies for Identification of Fields Infested with Root-knot Nematodes (RKN) under Tomato Cropping System in Mwea, Kenya	
7	Mugao, LG	Tomato post harvest spoilage causes, and management in Mwea, kirinyaga County	Completed (MSc. 2016)
8	Soi L.C.	Antifungal activities of products of <i>Azadiracta indica</i> and extracts of <i>Warbugia ugandensis</i> on growth of <i>Phomopsis thea</i> in vitro	Completed (MSc. 2016)
9	Kibunja J. W	Effects of endophytic fungi and resistant tomato varieties on root knot nematodes in Coastal Region	Completed (MSc. 2016)
10	GW Ngundo	Evaluation of Root-knot Nematode Management Strategies Based on their Distribution in Tomato Fields in Mwea, Kenya	Completed (MSc. 2016)
11	Muchiri S.K.	Efficacy of <i>Ocimum kilimandscharicum</i> oil for post harvest management of <i>Aspergillus flavus</i> and <i>Sitophilos zeamais</i> infecting	Defended(2017)

		maize in Kakamega County, Kenya	
12	Muia H.N.	Antifungal activity of honey and crude extracts from selected plants against <i>Alternaria solani</i> (Tomato early blight):	Defended(2017)
13	Muthoni L.	Use of Oyster mushroom (<i>Pleurotus ostreatus</i>) to degrade used diapers and sanitary pads in selected estates in Thika, Kenya	(MSc supervision, on-going)
14	Njagi A.K.	Management of crown gall disease in selected rose flower farms in Kenya by use of <i>Artemisia</i> and ginger extracts	(MSc supervision, on-going)
15	Mativo F.N.	Effects of neem, garlic and aloe extracts on the development of postharvest potato soft rot caused by <i>Erwinia carotovora</i> bacteria	(MSc supervision, on-going)
16	Mbalanya M.M.	Effects of <i>A. Sativa</i> bulb, <i>A. indica</i> and <i>L. camara</i> leaf extracts on root-knot nematodes infecting tomatoes in Mwea, Kenya	(MSc supervision, on-going)
17	Mibei C.B.	Effects on cabbage leaves amendment, goat manure amendment, inorganic fertilizer and bactericide on the incidences and	(MSc supervision, on-going)

		severity of bacterial wilt in beans	
18	Eric T.K.	Control of <i>Cascuta</i> , an invasive species, using <i>Colletotrichum gleiosporoides</i>	(MSc supervision, on-going)

12. Administrative positions held to date

Current Responsibilities

1. School ODEL Coordinator
2. Departmental ODEL/IBP Coordinator
3. Departmental Coordinator, Plant Pathology Section
4. School grants committee member
5. Departmental postgraduate committee member

Past Responsibilities

1. Departmental time table coordinator
2. Departmental Exam coordinator
3. Curriculum review committee member
4. Seminar coordinator
5. Member of the undergraduate curriculum committee
6. Class advisor (First year)