

ACADEMIC STAFF PROFESSIONAL PROFILE FORM

1. Personal Data

Name: Magomere Titus Obidi
Title/Qualifications: Dr. /PhD
Department/Unit/Section: Department of Biochemistry & Biotechnology, School of Pure and Applied Sciences
Contact Address: P.O. Box 43844, Nairobi, Kenya
Position: Lecturer
Area of Specialization: Molecular Genetics, Biotechnology & Plant Molecular Breeding
Research Interests:
<ol style="list-style-type: none"> 1. Application of molecular markers and techniques in plant science.. 2. Molecular studies of ‘<i>Candidatus Liberibacter</i>’ species/strains causing huanglongbing disease of citrus in Kenya. 3. Plant biotechnology. 4. Gene flow studies in sorghum. 5. Sorghum breeding for improved nutrition.

2. Conference Presentations

S/N o	Presenter	Title of Paper presented	City/Country	Date of Conference	Funding (US\$)
1	Magomere, T.O., A. Aseta, E. Kimani, F. Wambugu, D. Kamanga, M. Njuguna.	Africa Biofortified Sorghum Event Focused Strategy In The Development, Introgression And Biosafety Consideration For Nutrient Enhanced Sorghum.	4 th Annual national biosafety conference; Nairobi, Kenya.	11 th – 14 th August, 2015,	Africa Harvest
2	Magomere, T.O.	Overview of the Africa Biofortified Sorghum (ABS) Project: Towards environmental release and commercialization of ABS- Sorghum.	Consultative meeting for CEOs of regulatory agencies for enhanced coordination of bio-safety matters,	Nairobi, Kenya , 19 th May, 2015.	
3	Magomere,	Evaluation of	3 rd annual	11 th – 14 th	Africa Harvest

	T.O., Obukosia, S.D., Zhao, Z., Albertsen, M.	fitness in F ₂ generations of Africa Biofortified Sorghum event 188 and weedy <i>Sorghum bicolor</i> subsp. <i>Drummondii</i> and <i>sorghum bicolor</i> subsp. <i>Verticilliflorum</i> .	national biosafety conference; Nairobi, Kenya.	August, 2014	
4	Magomere, Titus O.; Obukosia, Silas D.; Mutitu, Eunice; Ngichabe, Christopher; Olubayo, Florence and Shibairo, Solomon.	<i>Utility of the bacterial rplKJL- rpoBC operon in characterization, phylogeny and identification of proteobacteria.</i>	III International Conference on Environment al, Industrial and Applied Microbiolog y (BioMicroW orld2009), Lisbon (Portugal).	2 nd - 4 th December, 2009	
5	Magomere T.O.; Tardif F. and Pauls K. P.	Gene Flow From Sorghum Bicolor To Its Weedy Relatives And Its Consequences	Proceedings of the joint meeting of the Canadian Society of Plant Physiologist s Eastern Regional Meeting & the 40th Plant Developmen t Workshop. <i>McMaster University Hamilton Ontario</i>	December 2 nd 2006.	Guelph
6	Magomere T.O.; Tardif F. and Pauls K. P.	Gene Flow from Sorghum Bicolor to its weedy relatives and its	<i>7th workshop on sustainable horticultural</i>	28 th Nov – 1 st Dec 2007	

		consequences; Genetic polymorphisms and recombination hotspots on the sorghum genome.	<i>production in the tropics, Nairobi</i>		
7	Magomere, Titus O.; Obukosia, Silas D.; Mutitu, Eunice; Ngichabe, Christopher; Olubayo, Florence and Shibairo, Solomon.	PCR detection of “ <i>Candidatus Liberobacter africanus</i> ” that cause Huanglongbing disease on citrus plants in Machakos and Kakamega districts of Kenya.	<i>1st all Africa congress on biotechnology. African biotechnology stakeholders forum congress, Nairobi</i>	22-26 th September 2008	
8	Magomere T.O.; Obukosia S.D.; Mutitu E.W.; Ngichabe C.; Olubayo F. and Kimani Waithaka.	Comparison of the intergenic region of the ribosomal proteins (L10-L12) gene of Kenyan ‘ <i>Candidatus</i> ’ <i>Liberobacter</i> species.	<i>African crop science. Nairobi</i>	2003	
9	Obukosia S.D.; Mutitu E.; Waithaka K.; Olubayo F. and T. Magomere.	Molecular Indexing for the Huanglongbing Disease of Citrus.	In Vitro Cell. Dev. Biol. 38, P-1265	Spring 2002.	

3. Research / Funded projects

S/ No	Researcher	Year	Title	Donor	Funding (US\$)
1	T. Magomere. (Investigator)	2010-2020	African Biofortified Sorghum (ABS project) The project is implemented locally by Africa Harvest Foundation in collaboration with	Africa Harvest	

			DuPont Pioneer LTD, Kenya Agricultural and Livestock Organization (KALRO)		
2	T. Magomere. (Investigator)	2010-2020	Compare fitness characteristics of ABS event 188 X wild hybrids and non-ABS X wild hybrids in Nebraska and Kenya. University Of Nairobi, Africa Harvest Foundation, Pioneer LTD and Kenya Agricultural and Livestock Organization (KALRO).	Africa Harvest	
3	T. Magomere. (Principal investigator/ PhD study)	2010-2012	Interspecific hybridization within sorghum genus and transfer of <i>sorghum bicolor</i> alleles to weedy sorghum populations (<i>S. sudanense</i> ; <i>S. halepense</i> ; <i>S. bicolor</i> subsp. <i>verticilliflorum</i>) with the effects on hybrid fitness and fecundity	University Of Nairobi, Africa Harvest, Danforth	
4	T. Magomere. (Principal investigator/PhD study)	2005-2007	Gene flow from <i>Sorghum bicolor</i> to its weedy relatives and its consequences.	University Of Guelph, OAC/ University of Nairobi	
5	T. Magomere. (MSc student and research assistant basis)	2001-2004	Characterization of 'Candidatus' Liberobacter species / strains and survey of citrus pests	Rockefeller foundation (FORUM)	
6	T. Magomere. (Principal investigator)	2000-2003	Social economic factors influencing farmer participation in the adoption of	Okumenisches Studienwerk e.v. Bochum, Germany	

			horticultural innovations in Machakos and Kakamega districts of Kenya.		
7	T. Magomere. (Research assistant)	1999-2001	Citrus tissue culture tree project.	Netherlands Special Biotechnology Programme under the auspices of 'Kenya Agricultural Biotechnology Platform'.	

4. Publications

S/No.	Author	Year	Title	Journal	ISBN/ISSN Reference No.
1	Magomere, Titus; Ngugi, Kahiu; Obukosia, Silas; Mutitu, Eunice; and Shibairo, Solomon	2015.	The Population Structure of Wild Sorghum Species in Agro-Ecological Zones of Western Kenya.	<i>African Journal of Biotechnology</i>	Vol. 14(17): pgs.1475-1492.
2	Magomere, Titus; Ngugi, Kahiu; Obukosia, Silas; Mutitu, Eunice; and Shibairo, Solomon.	2015	Evaluation of relative competitive ability of <i>S. bicolor X S. halepense</i> and <i>S. bicolor X S. sudanense</i> hybrids. <i>Journal of biological sciences</i> .	<i>Journal of biological sciences</i>	15 (1): pgs 1-15
3	Magomere, Titus O.; Ngugi, Kahiu; Mutitu, Eunice; and Shibairo, Solomon and Obukosia, Silas D.	2015	Real Time PCR Mediated Determination of the Spontaneous Occurrence of <i>Sorghum bicolor</i> Alleles in Wild	<i>African Journal of Biotechnology</i>	14(7): pgs.551–568.

			Sorghum Populations.		
4	Magomere, Titus O. ; Ngugi, Kahiu; Mutitu, Eunice; and Shibairo, Solomon and Obukosia, Silas D.	2014	Evaluation of Multiplex PCR in detection of crop alleles and differential hybridization among weedy sorghum populations.	<i>Journal of biological sciences.</i>	Vol. 14, no.7, pgs.460-471.
5	Magomere, Titus O. ; Obukosia, Silas D.; Mutitu, Eunice; Ngichabe, Christopher; Olubayo, Florence and Shibairo, Solomon.	2009	Molecular characterization of ‘Candidatus Liberibacter’ species/strains causing huanglongbing disease of citrus in Kenya.	<i>Electronic journal of biotechnology</i>	[online]., vol. 12, no. 2.
6	Magomere, Titus O. ; Obukosia, Silas D.; Mutitu, Eunice; Ngichabe, Christopher; Olubayo, Florence and Shibairo, Solomon.	2009	PCR Detection and Distribution of Huanglongbing Disease and Psyllid Vectors on Citrus Varieties with Changes in Elevation in Kenya.	<i>Journal of biological sciences.</i>	vol. 9, no. 7, pgs 697-709.
7	Magomere, Titus; Ngugi, Kahiu; Obukosia, Silas D.; Mutitu, Eunice; and Shibairo, Solomon.	2015/ 2016	The effect of <i>Bacillus thuringiensis</i> delta endotoxin proteins on the fitness of F ₁ hybrids obtained from <i>S. halepense</i> X <i>S. bicolor</i> and <i>S. sudanense</i> X <i>S. bicolor</i> crosses grown in competition with their parents.	(In press)	

8	Magomere, T.O., Obukosia, S.D., Esther Kimani , Zhao, Z., James Gaffney, Che Ping, Marc Albertsen, Florence Wambugu.	2015	Evaluation of fitness in F ₂ generations of Africa Biofortified Sorghum event 188 and weedy <i>Sorghum bicolor</i> subsp. <i>Drummondii</i> and <i>sorghum bicolor</i> subsp. <i>Verticilliflorum.</i>	(In press)	
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5. Consultancy and community service

S/No.	Consultant (s)	Consulting Person/ Body/ Organization	Year	Title Consultancy Service	Payment (US\$)
1	Magomere, T.O	Africa Harvest	2014	ABS Project	

6. Affiliation to Professional Bodies

S/No	Name of professional body
	(i) American society of plant biologists.
	(ii) Canadian Society of Plant Physiologists.
	(iii) African crop science society.

7. National and International awards and Recognitions

S/No	Name of award or Recognition	Awarding Organization/Body	Year

8. External Examination (if any)

S/No	Institution	Year

9. Supervision of postgraduate students (if any)

S/No	Name of student	Thesis title	Status of project(e.g.Fiest year etc)
1	Adungosi A. Mary	Line by tester analysis of elite tropical maize lines backcrossed to temperate germplasm under stress and non-stress environments. MSc. Plant breeding and biotechnology. UON	Ongoing
2	Damaris Mwangi	Evaluation of Performance and Growing Environments of Key Grass Forages Using Spatial Data Mining and Knowledge Discovery-Image Classification Technique. A Case Study for Genus <i>Brachiaria</i> . PhD-Dryland Resource Management UON	Ongoing
3	James Amayi Barasa	Plant-microbe interactions: evaluating biosorption and bioremediation using maize lines for increased growth of biomass and bioenergy use. PhD-Plant science and crop protection UON	Ongoing
4	Ann Mureithi	Factors that affect implementation of ict in smallholder dairy co-operatives in Kabete-Kikuyu division, Kiambu district, Kenya. MSc in Agricultural Information and Communication Management	Done
5	Evelyn Namvua Katingi	Effects of Information Architecture on Website Usability: A Comparative Study between CGIAR Research Map and Kenya Agriculture Information Network, KAINet. MSc in Agricultural Information and Communication Management.	Done
6	Winfred N. Mugwimi	Evaluating adoption of mobile communication in accessing market information by horticultural farmers in Kirinyaga county. MSc in agricultural information and communication management	Done
7	Mohamed Bashir Moalim	The role of information dissemination approaches on climate change and food security in Jowhar, Somalia. MSc in agricultural information and communication management.	Done

11. Patents (if any)

S/No	

12. Administrative positions held to date