

CURRICULUM VITAE
DR. JAPHET MUTEKI KIRAGU

NAME	JAPHET MUTEKI KIRAGU
CURRENT POSITION	Chairman, Department of Biological Sciences
UNIVERSITY ACADEMIC POSITION	LECTURER
INSTITUTION	Machakos University
PHYSICAL ADDRESS	Machakos town, Along Machakos Wote Road.
PERSONAL DATA	
PLACE OF BIRTH	Chuka, Tharaka / Nithi County
NATIONALITY	Kenyan
PROFESSION	Research Entomologist / lecturer
CONTACT ADDRESS	PO Box 136 – 90100 Machakos
1. SUMMARY OF EXPERIENCE (maximum 300 words)	
<p>Dr Japhet Mutegi Kiragu is a career educationist and Scientist. He first graduated as a biologist / Educationist (BEd(Science)) from the University of Nairobi in 1985. After a short stint in Education, he proceeded to read and diversify his careers to a research scientist. This culminated in graduating in 1990 with a Master of Science Degree in Medical and Veterinary Entomology from the same University. He further proceeded to practice and read Entomology, and graduated with a PhD in Zoology from the University of Bristol (UK) in 1997. From then on he has spent most time on scientific research. His research experience is on the behaviour and ecology of disease vectors of medical and veterinary importance, with a view to developing and validating cost – effective, environmentally friendly and sustainable disease control technologies. His pet subject of research was on the tsetse fly, and African Animal trypanosomiasis. This largely involved behavioural and ecological studies of tsetse flies and their role in disease transmission, as well as developing and validating appropriate, environmentally friendly and cost – effective methods of tsetse control as part of trypanosomiasis management. He has facilitated registration of tsetse control products in Kenya. Vector eradication remains an integral part of disease elimination. Dr Kiragu trained on safe use of atomic energy and is a n Sterile Insect Technique (SIT) expert. In this regard, he has worked as programme manager on a tsetse eradication programme for Lambwe Valley in Kenya. He rendered expertise on programme management, tsetse mass rearing, male sterilization using a gamma cell irradiator and field entomological monitoring. This programme was supported by the International Atomic Energy Agency. Currently, he has a mix of the two careers as a University lecturer in biological science and Scientific research. He also currently Chairs the Department of Biological Science.</p>	

2. EDUCATION (beginning with recent)	
<i>Year (from – to)</i>	<i>Degree, Institution</i>
August 2001	Certificate in Safe use of Atomic Energy, Institute of Nuclear Science, University of Nairobi
1995 - 1997	PhD, in Zoology, University of Bristol, UK
1985 - 1990	MSc (Medical / Veterinary Entomology), University of Nairobi
1981- 1985	BEd(SC) University of Nairobi (Kenyatta University College)
1979 - 1980	Kenya Advanced Certificate of Education, Nkubu High School
1975 – 1978	East African Certificate of Education, Chuka High School
3. EMPLOYMENT	
<i>Years since</i>	<i>Company / Institution</i>
2017- present	Machakos University
2015 – 2017	Machakos University College
2013 - 2015	Kenya Agricultural and Livestock Research Organisation (KALRO)
2007 – 2013	Kenya Agricultural Research Institute (KARI)
1990 – 2007	Kenya Trypanosomiasis Research Institute (KETRI)
1985 – 1990	Teachers Service Commission (TSC)
4. POSITIONS PREVIOUSLY HELD	
<i>Year (from – to)</i>	<i>Position, Project / Programme, Company / Institution / Client Description of roles and responsibilities</i>
November 2015 – present	Chairman, Biological Sciences Department, Machakos University Duties: Management of Academic programmes dealing with all biological sciences

August 2015 – Present	Lecturer, Department of Biological Science, Machakos University Duties – Lecturer in biological science
2010 – 2015	Senior Research Officer and Head of Vector Biology and Control Programme, KALRO Career interest: Development of environmentally friendly and cost effective methods of control of vector borne diseases. Duties <ul style="list-style-type: none"> • Project coordination in the programme • Research on control of vector borne diseases of medical and veterinary importance.
March 2000 – June 2013	Research Officer and Head of Entomology Division, Kenya Trypanosomiasis Research Institute, Duties: - Division Administration Manager, - Research on management of tsetse fly populations. - Safe use of atomic energy for insect pest population management.
1990 – 2000	Research Officer in Entomology Division, KETRI Duties: Research on methodologies for control of tsetse flies, genus <i>Glossina</i> as an integral part of trypanosomiasis management
1985 – 1990	Graduate teacher of Biology and mathematics, Teachers Service commission, Stations: Kiambu High School and Kegongge Secondary School.

5. TEACHING RESPONSIBILITY

<i>School/Institute</i>	<i>Year/Class/Discipline</i>
School of Pure and Applied Sciences, Department of Biological Science	<p>Year 1 SZL 100 General zoology SZL 105 Laboratory methods and techniques in Zoology SZL 103 Introduction to histology SBT 100 Cellular basis of life</p> <p>Year 2 SZL 201 Invertebrate zoology SZL 203 Developmental biology SZL 207 Fundamentals of immunology</p> <p>Year 3 SZL 303 Essentials of molecular biology SZL 315 Introduction to parasitology</p> <p>Year 4 SZL 405 Medical helminthology SZL 406 Medical protozoology</p>
School of Health Sciences, Department of Public Health	<p>Year 3 PPH 315 Public health entomology HEH 315 Environmental parasitology</p>

6. EXTERNAL APPOINTMENTS/AWARDS

<i>Year</i>	<i>Appointment as/Institution/Project</i>
2013 – present	Member, Rhino Steering Committee, Kenya Wildlife Service

7. OTHER LEADERSHIP POSITIONS	
<i>Year</i>	<i>Position/Programme/Institution</i>
May 2011 - 2013	Member, Board of Governors - Ikuu Girls' High School, Tharaka / Nithi county
May 2013 - Present	Member, Board of Governors – Ibiriga Secondary School, Tharaka / Nithi county
8. RESEARCH ACTIVITIES/PROJECTS (Past and Present)	
<i>Years/Duration</i>	<i>Position /Title / Sponsor</i>
2014 – 2015	Principal Investigator (PI). Testing the efficacy of Syptertix for the control of tsetse and trypanosomiasis in Kenya, KALRO / Noorbrook (K) Ltd.
2012 –2014	Principal Investigator (PI). Using an integrated approach for enhanced livestock health, production and productivity in Kenya. A new multi-disciplinary study./ A Technical Cooperation Programme (TCP) with the International Atomic Energy Agency (IAEA).
2012	Principal Investigator (PI). Testing the efficacy of Zero fly livestock fence for the control of tsetse and trypanosomiasis in Kenya / Vestergaard Frandsen
2011	Principal Investigator (PI). Tsetse infestation and livestock trypanosomiasis prevalence in Sera and Namunyak conservancies in Northern Kenya / Kenya Wildlife Service and Northern Rangeland Trust
2005 – 2010	Principal Investigator (PI). Tsetse infestation and population management in Meru National Park / Kenya Wildlife Service
2002 – 2014	Principal Investigator (PI). Integrated Area-wide tsetse and trypanosomosis management in the Lambwe Valley, Kenya/ A Technical
1990 – 1992	Principal Investigator (PI). Towards the success of community based tsetse and trypanosomosis control in Kathekani, Kenya / Department of Foreign International Development (DFiD)
1992 – 1997	Principal Investigator (PI). Behaviour and ecology of <i>Glossina brevipalpis</i> Newstead and its implication in the transmission of livestock trypanosomosis in Kibwezi, Kenya (a Ph.D study) / British Council and Department of Foreign International Development (DFiD)
1990 - 1992	Principal Investigator (PI). Testing the efficacy of cypermethrin high cis pour-on insecticide formulation (Ectopor ^R) for tsetse control in a high challenge area of Taru and Taita Ranches in the coast province of Kenya / Ciba Geigy (Kenya Swiss Chemical Company)
1986 - 1988	Principal Investigator (PI). Msc Thesis entitled 'Resting sites and predation levels of adult <i>Glossina pallidipes</i> Austen in Nguruman, Kenya / National Council for Science and Technology and DAAD
9. CONSULTANCIES AND EXPERT MISSIONS	
<i>Year from – to</i>	<i>Position, Project / Programme, Company / Institution / Client Description of roles and responsibilities</i>
September 2019	Expert Resource person, African Union Pan African Training course on management of tsetse fly population, ICIPE, Nairobi, Kenya.
April 2015	Community Trainer, Somali – tsetse and trypanosomiasis management To assist in management of wild tsetse population in Somalia. Consultancy report prepared for the International Committee of the Red Cross

December 2004	Expert Mission, To assist the Livestock Health Research Institute (LRI), Uganda on tsetse mass rearing. Duty Station: Tororo, Uganda. Consultancy report prepared to the International Atomic Energy Agency (IAEA)
October 2001	Expert Mission, To assist the Tsetse and Trypanosomiasis Research Institute, Tanga, United Republic of Tanzania with Initiation of Baseline Data collection of <i>Glossina brevipalpis</i> Newstead. Duty Stations: Tsetse and Trypanosomiasis Research Institute, Tanga and Mafia Island, United Republic of Tanzania. Consultancy report prepared to the International Atomic Energy Agency (IAEA)

10. OUTREACH ACTIVITIES	
<i>Year from - to</i>	<i>Specific description of Activity</i>
11. LINKAGES AND COLLABORATIONS	
<i>Year from - to</i>	<i>Description of links/collaborations</i>
1995-1997	International Centre of Insect Physiology and Ecology (icipe): Tsetse population dynamics in Nguruman, Kenya: Dr. RD Dransfield
2001 - 2015	International Atomic Energy Agency <ul style="list-style-type: none"> • worked in two TCP projects <ul style="list-style-type: none"> ○ tsetse eradication in Lambwe Valley ○ Improved livestock health, production and productivity • Enjoyed two expert missions, to Uganda and Tanzania • Trained as an SIT expert
12. TRAININGS /WORKSHOPS/SYMPOSIA ATTENDED	
17 – 28 September 2018	Resource Person (Entomologist) 9 th African Union – Pan African Tsetse and Trypanosomiasis Eradication Campaign (AU-PATTEC) – A training course for managers of tsetse and trypanosomiasis eradication programmes in Africa, held at KARI – Typanosomiasis Research Centre
19 th February – 2 nd April 2015	Trainer: Tsetse and trypanosomiasis management for Tsetse Control project field staff in somali. Conducted for International Committee of the Red Cross, Dhobley, Somali
14 – 23 December 2013	Resource Person (Entomologist) 5 th Africa Union – Pan African Tsetse and Trypanosomiasis Eradication Campaign (AU-PATTEC) – A training course for managers of tsetse and trypanosomiasis eradication programmes in Africa, held at KARI – Typanosomiasis Research Centre
17 – 22 September 2012	Resource Person (Entomologist) Management of tsetse fly populations in conservation areas – A training course for Research Officers and Managers from the Kenya Wildlife Service held at KARI – Typanosomiasis Research Centre
30 -31 st August 2012	Resource Person (Entomologist) Ensuring a Healthy Wildlife Ecosystem through Appropriate Tsetse Control Strategies in Conservation Areas. KWS Nairobi
23 January– 3 February 2012	Resource Person (Entomologist) FAO/IAEA Regional Training Course on Standardized Collection and Processing of Tsetse Flies for Molecular Tsetse Population Genetic and Morphometric Analyses, Nairobi, Kenya

16 th -27 th June 2008	Resource Person (Entomologist) Training course on the Diagnosis and Management of Human African Trypanosomiasis (HAT) for Primary Health Care Workers, Nairobi, Kenya. Supported by the World Health Organisation
2005	Participant Safe use of Atomic Energy: Basic course on Radiation Protection and Safety (Certificate course). Institute of Nuclear Science, University of Nairobi
30 th September – 4 th October 2002	Participant Writing Competitive Grant Winning Proposals organized by Moi University, Kenya Forestry Research Institute and the International Centre for Research in
11 th April - 17 th May 2001	Participant Interregional FAO/IAEA Training course on the use of the Sterile Insect and related Techniques for the Area-wide management of insect pests. Organized by the International Atomic Energy Agency and the University of
5 th - 7 th of March 2018.	Participant: ESPA's Professional Development Course (PDC) on Ecosystem Services for Poverty Alleviation which will be held at Kenyatta University, Nairobi, from
August 2000	Participant Senior Management Course organized by Modern Management Institute at the Silver springs Hotel, Nairobi

13. MEMBERSHIP TO COMMITTEES/BOARDS	
Member	University Senate, Machakos University
Member	
Member	
Member	
14. MEMBERSHIP TO PROFESSIONAL ASSOCIATIONS /BODIES	
Member	Kenya DAAD Scholars Association (KDSA)
Member	Societal for the Peaceful Application of Nuclear Science (SPANS)
Member	
Member	
Member	
Member	
15. LANGUAGE PROFICIENCY	
Excellent	English, Kimeru
Fair	Kiswahili

17. ABSTRACTS PRESENTED FOR CONFERENCES

1	Japhet M. Kiragu, Githaiga Wagate. Bio-assay as a cost effective technology to evaluate the efficacy of insecticides used in trypanosomiasis control in Kenya. SEKU-UMMA conference, November 2018
2	
3	

18. PUBLICATIONS

<p><u>JM Kiragu</u>, G Murilla, J. Murage, G.Zivanovic, and JO Owago (2014). Recent advances in the use of insecticide – incorporated screens for trypanosomiasis management in zero grazing units. KVA scientific conference, 23-26th April 2014, Eldoret, Kenya</p>	
<p>Kiragu JM, Owago, J and Zivanovich G. (2013, forthcoming in September). A new insecticide screen for tsetse control. ISCTRC, AU-IBAR, 127.</p>	
<p>Kiragu JM, Thande PC and Njue R (2011): Interactive trapping responses of <i>Glossina brevipalpis</i> Newstead and <i>Glossina pallidipes</i> austen in Kenya. ISCTRC, AU-IBAR, 126,351 - 359</p>	

James Karuku Kibugu, Margaret Wanjiku Muchiri, Geoffrey Njuguna Ngae, Alfred mwatari Mumba, Japhet Mutegi Kiragu . 2010, Effects of Ethidium on female reproductive performance of laboratory reared tsetse flies, <i>Glossina morsitans morsitans</i> Westwood (Diptera: Glossinidae), Acta tropica: 116, 157-160
James Karuku Kibugu, James Ngugi Mwangi, Japhet Mutegi Kiragu , Margaret Wanjiku Muchiri, Kariuki Ndungu and Raymond Ellie Mdachi 2010. Impr survival of laboratory reared tsetse flies, <i>Glossina morsitans morsitans</i> Westwood (Diptera: Glossinidae) through use of homidium bromide-treate blood diet, International Journal of tropical insect science 30(3): 163-166
JK Kibugu, JM Kiragu , AM Mumba, DM Mwangangi and MW Muchiri 2010. Improved protocol for aseptic collection and handling procedures of bovine blood diet in areas with special contamination challenges for use in tsetse rearing. Laboratory animals; 44 281-282
JM Kiragu (2009): Trap entry responses of <i>Glossina brevipalpis</i> Newstead in Kenya, ISCTRC conference, Kampala, Uganda
Japhet Kiragu, (2007). Ruma National Park, The gateway to Western Kenya. Farmers Pride Magazine, FarmView Media Service, 16-17, Nairobi
Njiru ZK, Constantine CC, Guya S, Crowther J, Kiragu JM , Thompson RC, Davila AM. (2005). The use of ITS1 rDNA PCR in detecting pathogenic African trypanosomes. Journal of Parasitology Research
JM Kiragu and Paul Ngare (2004). Is removal trapping appropriate technology for tsetse control? KVA Conference, Kisumu, May 2004
J. Mathu Ndungu & Japhet M. Kiragu . (2004) <i>Glossina</i> as a Human and Agricultural problem in Africa. Presentation at a World Health Organisation Experts Committee, Geneva, Switzerland, April 2004
Catley, A., Irungu, P., Simiyu, K., Dadye, J. Mwakio, W., Kiragu J. and Nyamwaro, S.O. (2002). Participatory investigations of bovine trypanosomiasis in Tana River District, Kenya. <i>Medical and Veterinary Entomology</i> , 16, 1-12
Kibugu JK, Mwangi JN, Kiragu JM, Muchiri MW, Ndung'u K, Mdachi RE The efficacy of Triladly® 50% in cryopreservation of low concentration pathogenic trypanosomes. Journal of Protozoology Research 20, 27

19. POSTGRADUATE STUDENTS SUPERVISION

Year	Student Details/Status
2015 - 2018	Truphena Wanja Kithaka – Efficacy of Sybertix spray for tsetse control in Kenya' MSC Thesis, University of Nairobi. Thesis submitted, 2018. Graduated
2002 - 2005	Sylvance Okeyo Okoth : PhD Study 'Infectivity of different sub populations of <i>Glossina pallidipes</i> to <i>Trypanosoma brucei rhodesiense</i> in Kenya', Kenyatta University, PhD awarded 2005
2002 - 2005	Daniel Ochieng Gamba , MSc study 'Influence of age – category of wild <i>Glossina</i> Spp (Diptera: Glossinidae) on trypanosome species distribution and host preference at Nguruman, Kajiado district', University of Nairobi, MSc awarded
2008	Kinuthia Karen Wairimu , BSC Research Project 'Efficacy of Tsetse tick pour – on for tsetse control. University of East Africa, Baraton.- Subject score B - Graduated

20. DEGREE PROGRAMMES DEVELOPED AT MACHAKOS UNIVERSITY	
<i>Year</i>	<i>Degree/Number Enrolled</i>
21. REFEREE: Available upon request	
1.	Prof Adiel Micheni Magana Chuka University
2.	Dr Judith Chemuliti Centre Director Biotechnology Research Institute – KALRO Muguga, PO Box 362, <u>KIKUYU 00902</u>
3.	Prof. Simon Karanja Department of Biochemistry and Molecular Biology, Jomo Kenyatta University of Agriculture and Technology, PO Box62000 <u>NAIROBI</u>