



## **CURRICULUM VITAE**

### **1. PERSONAL DETAILS:**

FULL NAME : **PROF. PAUL KAMAU MBUGUA**  
CONTACT ADDRESS : KENYATTA UNIVERSITY,  
DEPARTMENT OF BIOLOGICAL SCIENCES  
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### **2. AREA OF SPECIALISATION:**

Plant Taxonomy and Biosystematics; ASAL succulents.

### **3. INSTITUTIONAL MEMBERSHIPS:**

- 1979- to date Member of Kenya Students Christian Fellowship involved in High School and Certificate Colleges Counselling. This involves group and individualised counselling.
- 1998 – date Member of AETFAT. A body dealing with study of wild African vegetation
- 1998- 2006 Member of Global Environmental Facility (GEF) National Review Panel of the National Environment Management Authority (NEMA) within the Ministry of Natural Resources and Environmental Conservation – Kenya Government.
- 2000 – date Member of People and Plants. An international body dealing with plants conservation and publications.
- 2000 – date Member of PROTA. Dealing with compilation of Tropical African plants of economic importance to man.
- 2002 – date Alumni of Advanced Leadership Training at Haggai Institute, Singapore.
- 2005 – date Member of RUFORUM. An organisation dealing with research funding in 10 African universities in Eastern and Southern Africa.
- 2005 – 2006 Appointed member of the National Committee working on the National Policy on Traditional Medicine and Medicinal Plants with the National Coordinating Agency for Population and Development, Ministry of Planning and National Development.

2006 – 2007 Member of BAZONET working Group looking into the issues of biodiversity in East Africa.

#### 4. PUBLICATIONS AND CONFERENCE PROCEEDINGS:

- Mbugua, P.K., 1992.** Need for revision of the genus *Sansevieria* Thunb. *The Sansevieria Journal* 1(1):5-6.
- Newton, L.E. & **Mbugua, P.K., 1993.** A checklist and identification key for succulent plants in general cultivation in Nairobi. *Journal of East Africa Natural History Society and National museum* 82(201): 43-53.
- Newton, L.E. & **Mbugua, P.K., 1993.** *Sansevieria* leaves: a thirst quencher for baboons. *The Sansevieria Journal* (1):5-6.
- Mbugua, P.K., 1994.** Rediscovery of *S. parva* at Nairobi River Falls. *The Sansaviera Journal* 3(3):59-62.
- Mbugua, P.K., 1994.** Three *Sansevieria* species of Kenya 1. *Sansevieria robusta* N.E.Br. *Cactus and Succulent Journal* (U.S.) 66:87—88.
- Mbugua, P.K., 1994.** *Sansevieria* Thunb. In Agnew A.D.Q and Agnew S., Upland Kenya Wild Flowers. Second Edition. 312 (Plates 140 & 141). East Africa Natural History Society, Nairobi.
- Mbugua, P.K., 1995.** Inter-loans Abroad. In *Forum for Inter-lending* (FIL) Newsletter. Issue 18 No.0966-2154. February Printed at British Library Documentary Supply Centre.
- Mbugua, P.K. & Moore, D.M., 1996.** Taxonomic studies of the genus *Sansevieria* Thunb. (Dracaenaceae). In AETFAT IVX Congress Proceedings. L.J.G. Van der Maesen *et al.* (Eds.), The Biodiversity of African Plants, 489-492, Kluwer Academic Publisher; Netherlands.
- Mbugua, P.K., 1998.** Three *Sansevieria* species of Kenya I. *Sansevieria robusta* N.E.Br. *Cactus and Succulent Journal* (U.S.) 66:87-9).
- Mbugua, P.K., 1998.** Three *Sansevieria* species of Kenya II. *Sansevieria braunii* N.E.Br. *Cactus and Succulent Journal* (U.S.) 70(6) Nov.-Dec. 311-312.
- Mbugua, P.K. and Moore, D.M., 2003.** Taxonomic Studies of the Genus *Sansevieria* (Dracaenaceae). In: van der Maesen L.J.G. (Eds): The biodiversity of African plants. Generic delimitations in flowering plants 489-492.
- Mbugua, P.K. 2004.** Proceedings of the AETFAT meeting held in Addis Ababa Ethiopia. (ined).
- Mairura, F.S.; Mugendi, D.N.; Ramisch, J.J.; Mwenje, J.I. and **Mbugua, P.K. 2004.** Assessment of Farmers Perception of Soil Quality Indicators for Crop Production Within Small farming Systems in the Central highlands of Kenya. In Proceedings on Status of Environmental Health in the Eastern Africa Region: Opportunities, Challenges and the Way Forward. Department of Environmental Health, Kenyatta University, 24<sup>th</sup> – 26<sup>th</sup> March.
- Mairura, F. S, Mugendi, D N, Mwanje J I, Ramisch, JJ, Mbugua PK, and Chianu J.N. 2007
- Integrating scientific and farmers’ assessment of soil quality indicators in  
Central Kenya. *Geoderma*. 139: 134-143
- Mairura, F. S, Mugendi, D N, Mwanje J I, Ramisch, JJ, Mbugua PK, and Chianu J.N.

2007. Scientific evaluation of smallholder agricultural land use knowledge in Central Kenya. *Land degradation and development*. 18: 1-14
- Mairura F.S., Mugendi D.N., Mwanje J.I., Ramisch J.J. and Mbugua P.K. 2007. Assessment of farmers' perceptions of soil quality indicators within smallholder farms in the central highlands of Kenya In: *Advances in integrated soil fertility management in sub-Saharan Africa: challenges and opportunities* (Eds.) Bationo A, Waswa B, Kibara J and Kimetu J, Springer.
- Mairura, F. S, Mugendi, D N, Mwanje J I, Ramisch, JJ, Mbugua PK, and Chianu J.N (2004). *Assessment of farmers' perceptions of soil quality indicators for crop production in Chuka and Gachoka divisions, Kenya*. Status of Environmental Health Education in the Eastern Africa Region: Opportunities, challenges and the way forward. Proceedings of the First International Conference on Environmental Health, Kenyatta University. Pages 203-208.
- Mairura, F. S, Mugendi, D N, Mwanje J I, Ramisch, JJ, Mbugua PK, and Chianu J.N (2003). *The Role of Indigenous Knowledge in management of soil quality among smallholders in Chuka and Gachoka divisions, Kenya*. Proceedings of the 21st Soil Science Society of East Africa Journal, p 101-110.
- Mbugua, P.K.** and Ngwiri, M.J. **2004**. Taxonomy and Distribution of some Kenyan taxa Of the Genus *Sansevieria* Thunb. Asparagaceae Juss. In Proceedings of Second National Zoological Postgraduate students Conference Abstract Volume held in Kenyatta University 3<sup>rd</sup> –6<sup>th</sup> August 2004 at Kenyatta Virtual University Hall.
- Mbugua, P.K.** and Khalumba, M.L. **2004**. Ethnobotany, Phenology and Conservation of Some Highland Species of the Genus *Sansevieria* Thunb.: Case of Maragua and Nakuru Districts, Kenya. In Proceedings of Second National Zoological Postgraduate students Conference Abstract Volume held in Kenyatta University 3<sup>rd</sup> –6<sup>th</sup> August 2004 at Kenyatta Virtual University Hall .
- Kung'u J.B.;B. Kiviyatu and **P. K. Mbugua, 2006**. *Challenges to utilization and conservation of medicinal trees and shrubs in Eastern Africa*. In: Owuor, B.O., Kamoga, B., Kungu, J. B. and Njoroge, G. (Editors). Some medicinal trees and shrubs of Eastern Africa for sustainable utilization and commercialization. World Agroforestry Centre, Nairobi. ICBN 9966-923-52-7. P 52-57.
- Kung'u, J.B., B. Kiviyatu and **P.K. Mbugua, 2006**. Potential of Medicinal Plants for

- Pharmaceutical Industries in Kenya. The Case of Kamba Districts in Kenya.(Ined).
- Kahuthia-Gathu, R.; Bernard, L.; Poehling, H.M. and **Mbugua, P.K.** 2006. A survey on distribution and seasonality of wild crucifer species, alternative hosts of diamondback moth *Plutella xylostella* (Lepidoptera: Plutellidae) in major crucifer growing areas of Kenya. (Ined).
- Kahuthia-Gathu, R.; Bernard, L.; Poehling, H.M. and **Mbugua, P.K.** 2006. A survey on diversity and distribution of wild crucifers in major crucifer growing areas of Kenya. (Ined).
- Mwachala, G. and **Mbugua, P.K.** 2007 Dracaenaceae. 43 pp. Flora of Tropical East Africa. Royal Botanical Gardens, Kew .
- Mbugua, P.K.** and Khalumba, M.L. 2008. Ethnobotany, Phenology and Conservation of Some Highland Species of the Genus *Sansevieria* Thunb.: Case of Maragua and Nakuru Districts, Kenya. *East African Journal of Botany* 1(2):156-163.
- Omwega, E.O.; Okemo, P.O.; **Mbugua, P.K.** and Ogot, C.P.K., 2009. Ethnobotanical survey and antimicrobial evaluation of medicinal plants used by the Samburu community (Kenya) for treatment of Diarrhoea. *Pharmacognosy Magazine* 4(18): 166-176.

## 5. AWARDS

- 2000 Dec. - Jan. 2001 Offered a Scholarship by the Israel Govt. to attend a Mashav Course for six weeks in Ben-Gurion University, J. Blaustein Inst, for Desert Research, Sede Boker Campus, Israel.
- 2002, 31<sup>st</sup> Jul – 22 Aug. Attended a course on Advanced Leadership Training at Haggai Institute, Singapore.
- 2004, June-July, Appointed consultant by UNDP in *Enabling Activities* for GEF in preparation for the First National Conference on National Dialogue Initiative at UNEP organised by NEMA and UNDP at Gigiri UN Headquarters.
- 2004, 3 -6<sup>th</sup> July, Attended and presented *Enabling Activities* consultancy findings to the National Conference on National Dialogue Initiative at UNEP organised by NEMA and UNDP at Gigiri UN Headquarters.
- 2002 – 2005 Dec. Principal Investigator of Rockefeller FORUM grant to fund the research on *Sansevieria* plants entitled: Studies in the taxonomy, distribution, phenology and ethnobotany of some Kenyan members of the genus *Sansevieria* Thunb. (Dracaenaceae Salisb.)

## 7. NATIONAL AND INTERNATIONAL MEETINGS &

- 🕒 1993 July 18-23 Presented a poster entitled “*Sansevieria* Thunb. (Dracaenaceae Salisb.): Diversity and Distribution” at Kew International Monocot Symposium, held at Jodrel Laboratories, London, England.
- 🕒 1993 August 2-4 Attended a Symposium on Models in Phylogeny Reconstruction at Flett Theatre, The British Natural History Museums, London, England.
- 🕒 1993 Sept. 10<sup>th</sup>. Presented a poster entitled “*Sansevieria* Thunb. (Dracaenaceae Salisb.): Diversity and Distribution” at Plant Science Laboratories, Reading University during the visit of students from Wageningen Agricultural University, The Netherlands.

- ⌚ 1994 Feb. 20<sup>th</sup> Gave a School seminar entitled “*Sansevieria* Thunb. (Dracaenaceae Salisb.): Diversity and Distribution: at Plant Science Laboratories, Whiteknights, Reading –England.
- ⌚ 1994 August 22-27<sup>th</sup> Presented a poster entitled “Systematics of the genus *Sansevieria* Thunb. (Dracaenaceae Salisb.) at AETFAT XIV International Congress at Wageningen, The Netherlands.
- ⌚ 1994 Sept. 18<sup>th</sup> Presented two postas entitled “*Sansevieria* Thunb. (Dracaenaceae Salisb.): Diversity and Distribution” at Plant Science Laboratories, Reading University during the visit of the British Cactus and Succulent Society delegates.
- ⌚ 1995 Feb. 4<sup>th</sup>. Attended a Botanic Latin meeting at PSL, University of Reading.
- ⌚ 1996 Sept. 26<sup>th</sup>. Presented a poster entitled: “Medicinal Uses of *Sansevieria* spp. (Dracaenaceae Salisb.)”, during the 5<sup>th</sup> International Congress of Ethnobiology at Kenyatta International Conference Centre organised by National Museums of Kenya.
- ⌚ 1997, 3-7 Feb. Presented a poster entitled “The Medicinal Uses of *Sansevieria* Thunb. spp. At the XVth AETFAT Congress at Harare, Zimbabwe.
- ⌚ 1997, 22<sup>nd</sup> Feb. Gave a seminar entitled “*Sansevieria*; African Distribution and Biosystematics.” to *Succulenta Club* members at Karen-Nairobi. The club is affiliated to East African Natural History Society Nairobi.
- ⌚ 2000, 21<sup>st</sup> June. Gave a talk on “Parenting and its Effects on Learning” to Parents of Upper Primary Pupils of Muthaiga Primary School – Nairobi.
- ⌚ 2000, 3<sup>rd</sup> Dec. – 15<sup>th</sup> Jan. 2001. Gave a seminar on The *Sansevierias* and Their Economic Uses at Ben Gurion University of the Negev, Israel while attending a course on Desert Irrigation Systems.
- ⌚ 2002, 31<sup>st</sup> Jul – 22 Aug. Attended a course on Advanced Leadership Training at Haggai Institute, Singapore.
- ⌚ 2003, 25-27<sup>th</sup> March. Presented a Seminar entitled: Studies in the Taxonomy, Distribution, Phenology and Ethnobotany of some Kenyan Members of the Genus *Sansevieria* Thunb. (Dracaenaceae Salisb.) in Rockefeller Postgraduates presentations at University of Nairobi, Upper Kabete Campus
- ⌚ 2003 21-27<sup>th</sup> Sept. Presented a poster entitled “The Medicinal Uses of *Sansevieria* Thunb. spp. At the XVIIth AETFAT Congress at Addis Ababa, Ethiopia.
- ⌚ 2003, 12-17<sup>th</sup> October, Was one of the Assessors during the paper presentations at the 6<sup>th</sup> Crop Science Conference held at Hilton Hotel, Kenya.
- ⌚ 18<sup>th</sup> May 2004, attended the National Conference by stakeholders on The Kenya National Environment Action Plan (NEAP) organised by Nation Environment Management Authority (NEMA) at Agricultural Finance Cooperation Bank Centre at Karen, Nairobi, Kenya.
- ⌚ 2004, 3-6<sup>th</sup> July, Attended and presented *Enabling Activities* consultancy findings to the National Conference on National Dialogue Initiative at UNEP organised by NEMA and UNDP at Gigiri UN Headquarters, Nairobi.
- ⌚ 2004, 3<sup>rd</sup> – 6<sup>th</sup> August, Presented two students: Jacinta Muthoni Ngwiri and Merceline Luxen Khalumba, to present seminars on Taxonomy, Ethnobotany and Conservation of *Sansevieria* plants in the Second National Zoological Students Conference at Kenyatta University, AVU Hall.
- ⌚ 2005, 6<sup>th</sup> – 9<sup>th</sup> August, Presented two students: Jacinta Muthoni Ngwiri and Merceline Luxen Khalumba, to present seminars on Taxonomy, Ethnobotany and Conservation of *Sansevieria* plants in the First National Biological Students Conference at Kenyatta University, AVU Hall.
- ⌚ 2004 Attended a stakeholders meeting at National Museums of Kenya on Herbal



Medicine and Utilization Strategies; organised by the National Museums of Kenya.

- ⌚ 7-8 Feb.2005. Attended RUFORUM National Consultative Meeting at Sagret Hotel Nairobi.
- ⌚ 2005, 5-9<sup>th</sup> Nov. Attended the 7<sup>th</sup> African Crop Science Conference at the Imperial Resort Beach Hotel Entebbe, Uganda. Presented two papers with my students.
- ⌚ 2006, 4<sup>th</sup> July. Attended a consultancy meeting on RUFORUM funding by the Swedish Government (SIDA/SAREC) facilitated by Peeter Pats (Consultant). Presented my two MSc students' findings and their contribution to agricultural development in Kenya.
- ⌚ 2006, 2<sup>nd</sup> October. Attended the First BOZONET National Workshop at La Mada Hotel, Thika Road, Nairobi.
- ⌚ 2006, 8-9<sup>th</sup> Nov. Attended the Second National BOZONET Workshop at Lenana Mount Hotel, Nairobi.
- ⌚ 2007, 2-7<sup>th</sup> April. Attended VICRES Harmonization Workshop held at Nile Resort Hotel, Jinja- Uganda
- ⌚ 2007, 24- 26<sup>th</sup> Sept. Attended and presented a Poster entitled: Use and Conservation of Medicinal Plants by the Ogiek of East Mau Forest, Nakuru District, Kenya at the Second Prota/Acta International Workshop and Investors' Forum at ICRAF, Nairobi.
- ⌚ 2007, 26<sup>th</sup> – 27<sup>th</sup> Oct. Attended an International Christian Ministries Global Leadership Summit at Nairobi Baptist Church, Ngong Road, Nairobi.
- ⌚ 2007, 16<sup>th</sup> Dec. Attended a workshop at IUCN Rapid Result Initiative in species conservation status.
- ⌚ 2008, 11<sup>th</sup> Feb. Attended a seminar on VicRes General Information and Proposal Writing at Kenyatta University AVU Main Boardroom.
- ⌚ 2009, 13<sup>th</sup> Feb. Attended a symposium on Revitalising Research at Kenyatta University Conference Centre. Organised by KU Centre for Research.

## **6. PARTICIPATION IN RESEARCH PROJECTS AND POST-GRADUATE**

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| 2002 April       | Internal Examiner of Mr. J. Kihara thesis on M. Env. Sci. Entitled: "Effects of Tree Nursery Growing Media and Farmers Management Techniques on Seedling Quality in Mt. Kenya Region".   |
| 2002 – 2007      | Supervisor of Mr. B.M. Kiviyatu Master of Environmental Studies (Agroforestry and Rural Development) thesis entitled: "Evaluation of Indigenous Medicinal Plants and Setting Priorities for Their Domestication in Ukambani District of Kenya". <b>Graduated April 2007.</b> |
| 2004, Oct.       | Internal Examiner of Mr. Kiura Jonathan Muriuki's M.Env. S (Masters in Environmental Studies [Social Forestry]) thesis entitled: Informal Agroforestry Tree Seed Quality and Supply Systems: A Case of Peri-urban Nairobi, Meru and Western Kenya                            |
| 2004 – 2008      | Supervisor of Mr. Fidensio K. Ndegwa, MSc thesis entitled "Use, Conservation and Harvesting Techniques of Medicinal Plants by the Ogiek of East Mau Forest, Nakuru District, Kenya." <b>Graduated December 2008.</b>   |
| 2004 – Nov. 2007 | Supervised Mr. Karugia Elijah Samuel Kamau, MSc thesis title "The Impact of Controlled Animal Foraging and Burning   |

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| 2005 – to date             | on Range Condition and Successional Trends in a Bushed Grassland in Kimboko: Kenya” <b>Graduated Dec. 2007.</b><br>Supervisor of Amboga Enock B., MSc thesis entitled “Anti-mycobacterial Efficacy of Selected Medicinal Plants Used by Herbal Doctors in Kisii to Treat Respiratory Infections.”  |
| 2006, 29 <sup>th</sup> May | Internal Examiner of Ms. G.W. Ngugi MSc thesis entitled “Ethnobotanical Survey of Kiang’ombe Forest, Kenya: Floristic Inventory, Utilization and Conservation Status.”   |
| 2002 Sept – 2009           | Supervisor of 3 MSc Students studying various aspects of <i>Sansevieria</i> plants:<br>1. Taxonomy and Distribution of Some Kenyan Taxa of the genus <i>Sansevieria</i> Thunb (Dracaenaceae Salisb.) by Jacinta M. Ngwiri. <b>Graduated 14<sup>th</sup> December 2005.</b><br>2. Conservation, Phenology and Ethnobotany of some highland species of the genus <i>Sansevieria</i> Thunb.: Case of Nakuru and Maragwa Districts, Kenya by Merceline L. Khalumba. <b>Graduated 14<sup>th</sup> December 2005.</b><br>3. Conservation, Phenology and Ethnobotany of some lowland species of the genus <i>Sansevieria</i> Thunb.: Case of Kilifi and Taita-Taveta Districts, Kenya by Timon Otieno Boga. Defended his thesis on 12 <sup>th</sup> Feb. 2009. To graduate in March 2009. |
| 2006, October to date      | Supervisor of Duncan Zablon Kadima, MSc Thesis entitled: “Determination of Essential Trace Elements in Selected Medicinal Plants and Their Concoctions” from the Department of Chemistry, Kenyatta University.   |
| 2005, January – July 2008  | <b>External Examiner, University of Nairobi.</b> for Botany <b>Under-graduate units</b> in the School of Biological Sciences.  |
| 2007 May – to date         | <b>Chairman</b> Board of Postgraduate Studies in Plant and Microbial Sciences Department and also Member of SPAS BPS.  |
| 2008, September – to date  | <b>Chairman</b> Kenyatta University Community Outreach and Extension Programme Board (KUCOEP)  |

#### **7. RESPONSIBILITIES WITH THE NATIONAL GLOBAL ENVIRONMENT FACILITY (GEF) UNDER NATIONAL ENVIRONMENTAL SECRETARIAT (NES now NEMA)**

The main responsibilities are to go through project proposals and sit in the National GEF Task Force that reviews them.

Proposals reviewed by the Task Force in which I have sat, include:

- (a) *The Integrated and Environment through Promotion of Capacity Building* by Maendeleo Ya Wanawake Organisation.
- (b) *Biodiversity Conservation, Aberdare Forests and Adjacent Farms – Kenya* by The Indigenous Technology Development Centre.
- (c) *African NGO – Government Partnerships for Sustainable Biodiversity Action* by Birdlife International.
- (d) *Cherangany Forests Management* by Shelter, Water, Energy Resource Network.