CV FORMAT – KEFRI SCIENTISTS



Position: Chief Research Scientist (Entomology)

1. PERSONAL INFORMATION

- **1.1.** NAME : Mercy Gichora
- 1.2. ADDRESS: KEFRI Headquarters, P. O. Box 20412 00200 Nairobi, Kenya
- 1.3. PHONE: +254 714 854082 or +254 785 528645
- 1.4. EMAIL ADDRESS: mgichora@kefri.org or mewagio5@yahoo.com
- 1.5. NATIONALITY: Kenyan
- 1.6. GENDER: Female

2. QUALIFICATIONS

2.1. Academic Qualifications

PhD (Agricultural Science/(Beekeeping Ecology), Centre for Development Research (ZEFc), University of Bonn, Germany. 2003.

Master of Science (Forestry), Australian National University, Canberra, Australia, 1992.

Graduate Diploma (Forestry), Australian National University, Canberra, Australia, 1990

Bachelor of Science (Forestry), Moi University, Eldoret, Kenya, 1986

2.2. Key Competencies :

1. Professionalism \cdot 2. Responsibility \cdot 3. Gender issue awareness \cdot 4. Objective Decision making \cdot 5. Communication \cdot 6. Leadership \cdot 7. Trustworthiness & good ethics

2.3. Other Courses:

Women Executives Seminar. Kenya Institute of Administration. 1994

Senior Management Course. Kenya Institute of Administration. 2004. Environmental Impact Assessment and Audit Course. Kenya Institute of Administration, 17th Mar – 4th Apr 2008.

ISO 14001:2004 Environmental Management System Internal Audit Course. KEFRI Headquarters, 9th – 11th June 2010.

Strategic Leadership Development Programme, Kenya School of Government, Mombasa campus. 3 November - 13 December 2019.

3. EMPLOYMENT HISTORY

7 July 1986 - present: Research scientist, Kenya Forestry Research Institute

December 2013 - June 2014: Short term contract as a forest coordination expert by Ministry of Environment, Water and Natural Resources, State Department of Environment and Natural resources of the Republic of Kenya

1996 Part time Lecturer: Forest Entomology (FOR 316) in the Department of Forestry, Moi University, Eldoret, KENYA.

4. ADMINSTRATIVE RESPONSIBILITY

1986-1999 Head, Entomology Subprogramme, KEFRI

1998 Liaison Officer linking KEFRI/Forest Department, Ministry of Environment and Natural Resources. This marked the start of diversification from a purely research role to a more managerial one.

1999/ 2003- 06 Centre Director, Maseno Regional Research Centre, Kenya.

- 2012 2017 Chairperson, KEFRI Staff Retirement Benefits Scheme Board of Trustees whose worth was more than US\$ 20 million in 2017. I stepped down for smooth succession after launching of a long term management strategy for 2017 – 2030.
- **2019 present** Chairperson, KEFRI Staff Housing Committee, KEFRI Headquarters and CHERP

2019- present Upon request, Acting DD-FPI

5. PUBLICATIONS

5.1. Book Chapters

Gichora, M. 2009. Current status and historical aspects of Kenya's beekeeping. Part of chapter in "Development of Beekeeping in Developing Countries and Practical Procedures – A case study in Africa". A report by Japan Association for International Collaboration of Agriculture and Forestry (JAICAF).

NEMA. 2011. Kenya State of the Environment and Outlook 2010. Lead author Chapter 5 on 'Forests and Woodlands'. ISBN:9956-7460-5-6

H. Kojwang, **M. Gichora** and P. Bosu. (2019). The status and trends of forest pests and diseases and their management in Africa. In: African Forest Forum. The state of Forestry in Africa - Opportunities and Challenges. pp 75 - 97

Ngece, N. and **Gichora, M.** 2020. In: Xing Quan Zhang, Irina Eichenauer and Wolfgang Ryll (Eds). Financing for Resilient and Green Urban Solutions in Mombasa, Kenya. UN Habitat. ISBN Number (Series): 978-92-1-133389-3 ISBN Number: (Volume) 978-92-1-132854-7. 100 pp.

5.2. Technical Notes /Protocols/Guidelines

Day, R.; S. Atuahene; **M. Gichora**; E. Mutitu and D. Chacha. 1993. Sampling cypress aphids. Biological Control of Forest Aphids in Africa Technical Bulletin Series No. 2. IIBC.

Republic of Kenya, 2016, National Forest Programme 2016 - 2030

KEFRI. 2018. National Forest Health Research Strategy 2018 -2033

Ministry of Agriculture, Livestock, Fisheries and Cooperatives. Draft. National Agroforestry Research Strategy 2021 - 2030

Theses

Gichora, M. 2003. In: Vlek, P. L. G. (Ed-in-Chief). ZEF Ecology and Development Series No. 6. Towards realization of Kenya's Full Beekeeping Potential: A Case Study of Baringo District. Cuvillier Verlag, Goettingen, GERMANY. ISBN No. 3-89873-675-X. PhD Thesis. University of Bonn, Germany. **Gichora, M. W. 1992.** The significance of fungal decay of *Eucalyptus regnans* F. Muell. heartwood for some aspects of the biology of *Coptotermes lacteus* (Frogatt). Master of Science Thesis. The Australian National University.

6. RESEARCH

6.1. Completed

Gichora, M.; Oeba, V. 2015. Confidential final report submitted to Pest Control Products Board on Evaluation of efficacy of Undertaker (chlorpyrifos-ethyl 480/l) for control of termites in forestry and agroforestry.

Gichora, M.; Oeba, V. 2015. Confidential final report submitted to Pest Control Products Board on Evaluation for efficacy of Steward (0.3% gr) for control of termites in forestry and agroforestry.

Gichora, M.; Oeba, V. 2015. Confidential final report submitted to Pest Control Products Board on Evaluation of efficacy of Emerald (200sl) for control of termites in forestry and agroforestry.

Gichora, M., Gathogo, M. and Ingutia, C. 2018. Confidential final report submitted to Pest Control Products Board on Evaluation of efficacy of Vagan 50SC (Fipronil) for control of termites in forestry and agroforestry

Gichora, M., Gathogo, M. and Ingutia, C. 2020. Confidential progress report submitted to Pest Control Products Board on Evaluation of efficacy of Fiprox 3GR (Fipronil) for control of termites in forestry and agroforestry

Gichora, M.; Kiprop, J.; Ingutia, C. and Kiprop, A. 2021. Climate smart apiculture technologies, innovations and management practices: Baseline Survey of Kajiado, Tana River and Siaya Counties.

6.2. Mentorship and supervision

1986 to date Supervision, guidance and evaluation of students and interns on practical attachment to KEFRI. Work with three younger entomologists and several technical staff.

7. INNOVATIONS AND PATENTS (Intellectual Property)

KE/UM/2020/1400 - Utility model

8. CONFERENCES/SEMINARS/WORKSHOPS

8.1. Presentation of Papers at Academic and Professional Conferences

Gichora, M. W. and A. L. Owuor. 1988. Insect Pests in Exotic Plantations and Indigenous Forests of Kenya. In Proceedings: IUFRO Regional Workshop on Pests and Diseases of Forest Plantations. Bangkok, Thailand. 5th –11th Jun 1988.

Gichora, M.; S. Mutimba; M. Karanja and J. Buxton. 1993. Introduced and local natural enemies of forest insect pests in Kenya. In Proceedings: AAIS Conference on Beneficial African Insects: A renewable resource. Mombasa, Kenya. 5th – 1oth Sept 1993

Gichora, M., Wittmann, D. and A. Odulaja. 2001. Beekeeping in Baringo District: Which way forward for Research and Extension? In Proceedings: 37th APIMONDIA International Apicultural Congress. Durban, South Africa.

Gichora, M.; Mwaura, J.; Koech, C.; Etindi, G. and Oeba, V.O. 2009. Baseline survey of Farm Forestry in Selected Districts of Nyanza and Rift Valley Provinces, Kenya. In Muchiri, M. N., Kamondo, B., Ochieng, D., Tuwei, P. and Wanjiku, J. (Eds.). Recent Advances in Forestry Research for Environmental Conservation, Improved Livelihoods and Economic Development. Proceedings of the 4th KEFRI Scientific conference, Muguga, Kenya. 6-9 October 2008.

Gichora, M.; Omoloye, A. and Mohammodhur, D. 2011. South-South cooperation is necessary for sustainable beekeeping in Africa. Paper presented at the 2nd Ibadan Sustainable Development Summit, Nigeria. 8 – 11 August 2011.

Gichora, M. 2012. Characteristics of forestry landscapes that support beekeeping in Baringo County, Kenya. Paper presented in the technical session on forest based enterprises and services, IUFRO- FORNESSA Regional Congress. 25th – 29th June 2012, Nairobi, Kenya.

Gichora, M. 2017. Why a regional approach to management of forest pests and diseases in Eastern Africa? Paper presented in Session 57: D7 - Invasive Alien Species and International Trade - Detection Prior to Introduction, Measures and Policy for Mitigation at the IUFRO 125th Anniversary Congress, Freiburg, Germany, 18-22 September 2017.

Gichora, M.; Kojwang, H.; Bosu, P.; Gezahgne, A. and Ben Jamaa, M. L. **2019.** Science-based continental and regional policy interventions will help to sustain productivity of African

forests under changing climatic conditions and contain devastation by invasive insect tree pests and diseases. Session D1e - Forest Landscape Restoration for Climate change Mitigation and Adaptation: Integrating Research into Policy. **25th IUFRO World Congress to be held in Curitiba, Brazil. 29th September - 5th Oct 2019.**

Muita, R.; Osano, P.; **Gichora, M**. and Muo, K. **2019.** Modeling changes in the distribution of agro-climatological zones of Kenya for incorporation of area-specific mitigation and adaptation measures in integrated land use plans and forest management at Sub-county level. Session B4a: Climate Smart Forestry or How to Integrate Adaptation, Mitigation and Sustainable Forest Management. **25th IUFRO World Congress held in Curitiba, Brazil. 29th September - 5th Oct 2019**

Gichora, M.; Muli, E.; Kagio, S.; Kamau, S.; Kiprop, J.; Mweu, B.; Nyamu, V.; Nzuki, C.; Onyango, I.; Toroitich, F.; Ingutia, C. and Kiprop, A. 2021. Climate smart apiculture technologies, innovations and management practices: Their potential to improve hive productivityand food security in ASALs in Kenya. Paper presented under Honeybee Products Value Chain Theme. Tanzania Forestry Research Institute International Scientific Conference. Forest and Honeybee Products Value Chains for Development of Sustainable Livelihoods and Industrial Economy. 23rd - 25th February 2021, Mlimani City, Dar es Salaam, Tanzania.

8.2. Participation in Workshops/Conferences

Scientific Workshops:

KARI/DTI 1st Regional Workshop on Termite Research and Control. Nairobi, Kenya. 17th – 19th Aug 1992.

FAO Regional Workshop on the Leucaena Psyllid: A Threat to Agroforestry. Dar es Salaam, Tanzania. 10th – 14th Oct 1994.

AFF Pre-XIV World Forestry Congress Workshop. 4th - 6th September 2015. Durban, South Africa.

AFF Workshop on Sharing Knowledge and Experiences to Strengthen Collaboration Among Stakeholders in African Forestry. 26th - 30th September, 2016. Lomé, Togo.

African Forest Forum 10th Anniversary Workshop. 20th - 23rd May 2019. Nairobi, Kenya.

Scientific Conferences & Congresses

19th International Congress of Entomology. Beijing, China. 28th Jun – 4th July 1992.

Joint KEFRI/MENR Forest Department Conference on the Status of Forestry Research and Management in Kenya. Muguga, 3rd – 5th Jun 1996.

37th APIMONDIA International Apicultural Congress. Durban, South Africa. 28th Oct – 1st Nov 2001.

8th IBRA International Conference On Tropical Bees, Ribeirao Preto, Sao Paulo, Brazil. 6th – 10th Sept 2004.

IUFRO- FORNESSA 1st Regional Congress for Africa. 25th – 29th June 2012, Nairobi, Kenya.

XIV World Forestry Congress, 7th - 11th September 2015. Durban, South Africa

IUFRO 125th Anniversary Congress, Freiburg, Germany, 18th - 22nd September 2017.

Gatsby-Kenya Commercial Forestry Programme exposure visit to Commercial Forestry in South Africa. 14 - 19 April 2019.

IUFRO 6th International Casuarina Workshop. Krabi, Thailand. 21 - 25 october 2019.

Major Groups-led Initiative in Support of the Fifteenth Session of the United Nations Forum on Forests (UNFF15): Theme – "Cross-Sectoral Collaboration for Inclusive Forest Landscapes". United Nations Office in Nairobi, Kenya. 3 5 March 2020.

Tanzania Forestry Research Institute International Scientific Conference. Forest and Honeybee Products Value Chains for Development of Sustainable Livelihoods and Industrial Economy. 23rd - 25th February 2021, Mlimani City, Dar es Salaam, Tanzania.

8.3. Convening/Coordinating Conferences

2010 - 2012 Secretary of the organizing committees for the first IUFRO-FORNESSA
Africa Regional Congress & ITTO Forest Policy Day that was co-hosted by
KEFRI and ICRAF in Nairobi, Kenya from 25 – 29 June, 2012
2017 - 2018 5th KEFRI Scientific Conference Organizing Committee member

9. PROFESSIONAL ENGAGEMENT

9.1. Training

1987 Entomology in-house training course for upgrading knowledge and practical skills of technical staff

1992 – 1998 A resource person for KEFRI/JICA Agroforestry and Regional Social Forestry Training Courses (East and Southern Africa). My main area of expertise was pest management and Agroforestry.

2004 Plant Health in Agroforestry, A short course organized for Technical Staff in collaboration with ICIPE & Maseno University

2016 - **2017** A resource person for KEFRI/JICA Regional Training Courses on Adaptation to Climate Change in Africa through Social Forestry. My main area of expertise was Introduction to Green Growth and Climate Change.

9.2. Consultancies (for clients of Pest Control Products Board)

1) **Bayer Chemical Company 1994:** Evaluation of efficacy of Regent 3G (Fipronil) for control of termites in forestry and agroforestry.

Greenlife Crop Protection (Africa Ltd.)2013 - 2015.

Trials established in KEFRI Tiva Pilot Forest, DERP, Kitui

- 2) Evaluation of efficacy of Undertaker (Chlorpyrifos-ethyl 480/I) for control of termites in forestry and agroforestry.
- 3) Evaluation for efficacy of Steward (0.3% GR) for control of termites in forestry and agroforestry.
- 4) Evaluation of efficacy of Emerald (200SL) for control of termites in forestry and agroforestry.

Orbit Chemicals Limited. 2016 -2018.

Trials established on a farm in Kibwezi, Makueni County and on Kenya Tea Development Authority (KTDA) Theta Factory farm, Makuyu, Murang'a County.

1) Evaluation of efficacy of Vagan 50SC (Fipronil) for control of termites in forestry and agroforestry.

OSHO Chemical Industries Ltd (Kenya). 2019 - 2021

Trials established on Kenya Tea Development Authority farms owned by Theta Factory, in Makuyu, Murang'a County as well as by KTDA Mungania Factory in Kiamuringa, Embu County.

1) Evaluation of efficacy of Fiprox 3GR (Fipronil) for control of termites in forestry and agroforestry.

9.3. Collaboration with external organizations

Proposal development

Year	Call by	Proposal title
2017/18	IDRC /ACIAR	Can modifying design of modern beehives for enhanced temperature regulation give honey bees greater resilience to Climate Change in Africa? in partnership with KALRO Apiculture Research Institute and The Hive Ltd.
2018/19	GEF 7	Promoting Restoration of Degraded Landscapes, Conservation of Biodiversity and Mitigation of Climate Change for Improvement of Livelihoods of Coffee Farmers and Pastoral Communities Dependent on The Aberdares and Mt. Kenya Water Towers. Partners: KMD, KFS, KALRO/Coffee Research Institute & WRI
2019/20	KALRO- KCSAP	Climate Smart Beekeeping for Improved Incomes, Food and Nutrition Security in Kajiado, Tana River and Siaya Counties. Partners – SEKU, Min of Agriculture, Livestock & Fisheries (Directorate of Vet Services), Egerton Uni, Baraka Agricultural College and The Hive Ltd.
	NRF	Collaborative and integrated monitoring, early warning and forecasting system for early detection and effective control of desert locusts (<i>Schistocerca</i> gregaria) in Eastern Africa Region: The case of Kenya. Partners – KMD, DRSRS, DLCO-EA, Data4sdgs, ICPAC, Dudutech,
2020/2021	Global Biodiversity Information Facility (GBIF)	Institutional Support to GBIF for Biodiversity Information for Development (BID) project in SubSaharan Africa.

10. EXTERNAL AND INTERNAL RESEARCH GRANTS

KALRO-Kenya Climate Smart Agriculture Project: Climate Smart Beekeeping for Improved Incomes, Food and Nutrition Security in Kajiado, Tana River and Siaya Counties. Partners – SEKU, Min of Agriculture, Livestock & Fisheries (Directorate of Vet Services), Egerton Uni, Baraka Agricultural College and The Hive Ltd. KES 20million (USD 200,000)

National Research Fund: Collaborative and integrated monitoring, early warning and forecasting system for early detection and effective control of desert locusts (*Schistocerca gregaria*) in Eastern Africa Region: The case of Kenya. Partners – KMD, DRSRS, DLCO-EA, Data4sdgs, ICPAC, Dudutech. KES 30million (USD 300,000)

11. LOCAL, REGIONAL & INTERNATIONAL APPOINTMENTS 11.1. Local

2013: Forest Coordination Expert, Ministry of Environment, Water and Natural Resources, State Department of Environment and Natural Resources.

2020-21: Leader of Knowledge and Communication Pillar. National Agroforestry Strategy for Kenya 2020 - 2030.

11.2. Regional

2020 Vice President, Forestry Research Network of SubSaharan Africa (FORNESSA)

11.3. International

2017 Secretary, International Review Panel. Review of IUFRO 2015 - 2019 Strategy.

12. AWARDS AND RECOGNITION

Plaque. American Biographical Institute, **2006**. Woman of Achievement (for outstanding contributions to Forestry Research).

Certificate of Appreciation: 2017. International Union of Forestry Research Organizations Certificate of Appreciation for the role played in review of its 2015 - 2019 strategy

13. CONTRIBUTION TO KEFRIS ADVANCEMENT

INTERNATIONAL OUTREACH, STRATEGY DEVELOPMENT & REVIEW

2010 -2019 IUFRO Alternative International Council member (Kenya)

2015 Member, Mid-term Review Committee of KEFRI Strategic Plan 2013 - 2018

2017 Member, Committee for Development of KEFRI Strategic Plan 2018 - 2022

2020 Resource Mobilization and International outreach duties and added responsibilities

14. MEMBERSHIP TO PROFESSIONAL BODIES

Founder Member, Kenya Professional Association of Women in Agriculture and Environment (KEPAWAE). Since 1995. National Chairperson (2010 -2014), Chairperson Nairobi Branch 2021-

Member, Forestry Society of Kenya. Since 2010.

Member, Entomological Society of Kenya. Since May, 2020

15. REFEREES

Dr. Harrison Kojwang Regional Director Africa Forest Stewardship Council (FSC) East Africa Wildlife Society, Riara Road, Kilimani, P. O. Box 20110-00200 Nairobi, KENYA. Tel.: +254 713346795 Email: h.kojwang@fsc.org Skype: h.kojwang

Dr. Roger Day Programme Executive, Action on Invasives CABI, Canary Bird, 673 Limuru Road, Muthaiga P. O. Box 633-00621 Nairobi Kenya Tel.: +44 1491 829444; +254 20 2271000/20 Email: <u>r.day@cabi.org</u>

Dr. Michael Kleine IUFRO-SPDC & IUFRO Deputy Executive Director, IUFRO Headquarters Marxergasse 2, 1030 Vienna, Austria. Email: kleine@iufro.org Tel.: +43-1-877-0151-22 Fax: +43-1-8770151-50 Website: http://www.iufro.org