Academic Staff Profile

Personal Details

Name: GRACE WAMBUI GATHERI

Title/Qualification: DR./PhD **Department**: PLANT SCIENCES.

Designation/Position: SENIOR LECTURER

Email: gatheri.grace@ku.ac.ke

Contact Address: P.O. BOX 43844 00100 Nairobi.

Area of Specialization:

- Plant Taxonomy

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Research Interests:

- Classification of East African plants.
- Medicinal plants.

Google Scholar:

ORCID ID:



Academic & Professional Qualifications

- PhD Plant Taxonomy.

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Employment History

JAN 2012- To present: Senior Lecturer Department of Plant and Microbial Sciences, Kenyatta University. Now Plant Sciences Department

- 1988-Jan 2012: Lecturer, Plant and Microbial Sciences
- -1987-1988: Tutorial Fellow Department of Plant and Microbial Sciences (presently, Plant Sciences)
- -1978- Jan 1987: Kenya Agricultural Research Institute (KARI)

Publications

Referred Journals

➤ Kirika, P.M; Divakar, P.K; Bauruang, K; Leavitt, S.D; Crespo, A; Gatheri, G. W; Mugambi, G; Bennatti, M.N. and Lumbasch H.T. 2017. Molecular phylogenetic studies unmask overlooked diversity in the tropical lichenized fungal genus *Bulbothrixs*. l. (Pameliaceae, Ascomycota). *Botanical Journal of the Linnean Society*, 2017, 184, 387-399.

- ➤ Kirika, P. M; Divakar, P.K; Crespo, A; Gatheri, G.W; Mugambi, G; Leavitt, S.D; Moncada, B. and Lumbusch H.T. 2016. Molecular data show that *Hypotrachyna sorocheila* (Parmeliaceae) is not monophyletic. *The Bryologist*, 119(2):172-180.
- ➤ Kirika, P.M; Divakar, P.K; Crespo,A; Leavitt, S.D; Mugambi G; Gatheri G. W. and Lumbsch; H. T. 2016. Polyphyly of the genus *Canoparmelia* uncovering incongruencies between phenotype- based classification and molecular phylogeny within lichenized Ascomycota (Parmeliaceae). *Phytotaxa*289(1) 1179-3155
- ➤ Kirika, P.M; Divakar, P.K; Crespo, A; Mugambi, G; Oroko, E.A; Leavitt, S.D; Gatheri, G.W. and Lumbusch, H.T. 2016. Phylogenetic studies uncover a predominantly African lineage in a widely distributed lichen-forming fungal species. *Mycokeys* 14: 1-16.
- ➤ Kirika, P.M; Divakar, P.K; Leavitt, S.D; Buaruang, K; Crespo, A; Mugambi, G; Gatheri, G.W. and Lumbusch H.T. 2017. The genus *Relicinopsis* is nested within *Relicina* (Parmeliaceae, Ascomycota). *The Lichenologist* 49(3): 189-197.
- ➤ Kirika, P.M; Leavitt, S.D; Divakar, P.K;Crespo, A; Gatheri G W; Mugambi, G.andLumbsh, H.T. 2015 The monotypic genus *Bulborrhizina* belongs to *Bulbothrix* sensulato (Parmeliaceae, Ascomycota). *The Bryologist*, 118(2):164-169.
- ➤ Opinde, H.R; Gatheri, G.W. and Nyamache; A.K. 2016. Antimicrobiol evaluation of crude methanolic leaf extracts from selected medicinal plants against *Escherichia coli*. *J. Bacterial Parasitol*. ISSN: 2155-9597.
- ➤ Opinde, H. R; Gatheri, G W; Ogola, P.E; Arika, W. M; Wambani, J.R; Kebira, A.K. and Kamau, D.N. 2016. In vitro antifungal activity of leaf extracts from *Aloe secundiflora*, *Bulbine frutescens*, *Vernonia lasiopus* and *Tagetes minuta* against *Candida albicans*. *Med Aromat Plants*, ISSSN: 2167-0412MAP.
- ➤ Opinde, H.R; Gatheri, G.W. and Nyamache A.K. 2016. Antimicrobial activity of crude leaf extracts from medicinal plants against *Enterococcus faecalis*. *IJTCM* 1 (2): 0001-0009.
- ➤ Opinde, H.R; Nyamache, A.K. and Gatheri, G W. 2018. Antimicrobial activity, Qualitative phytochemical composition of crude leaf extracts from medicinal plants against selected entric bacterial pathogens, *Candida albicans*. *Bioteknologi* 15(1) 1-12.
- ➤ Opinde, H. R;Ogola, P.E Arika, W.M; Wambani, J.R; Gatheri, G.W. and Nyamache A.K.2016. Combined Effect of crude leaf extracts of selected medicinal plants against selected pathogens and *Candida albicans*. *J Antimicro* 2:110.
- ➤ Uleh, A.M. Newton, L.E; Mbugua, P.K. and Gatheri, G.W.2015.On the ancestry of the tetraploid shrubby Aloes in Kenya. *Haseltonia* 21:56-59.
- ➤ Chelashaw, J.M. Kamau F.N. and Gatheri G.W. 2007. A Survey of Some Medicinal Sold in Nairobi. *East Afr.J. Bot.* 1(1: (46-63).

- ➤ Gitonga, M.N., Gatheri, G.W., Cheruiyot, R., Gitonga, N.M. and Maingi, J.M.2010. Nodulation and Nitrogen Fixation in promiscuous and non-promiscuous soybean (*Glycine max* (L.) Merrill) varieties in Eastern Kenya.
- ➤ Jacinta E, Okemo P., Gatheri G. and Kariuki S. 2010, Antibiotic resistance patterns of *Escherichia coli* isolated from HIV-sero positive adults at Mbagathi District Hospital, Nairobi, Kenya. *J. Appl. Biosci*.

Conference/Workshops/Seminar Papers

- ➤ Gatheri, G.W. 2012. Riparian Vegetation Propagation for Improved Fisheries Productivity and Water Quality along River Nambale, Mbale District, Uganda. A paper presented in Fisheries and Aquaculture cluster workshop, Kisumu, November 2012.
- ➤ Benson Mwangi, Grace Gatheri, Abel Shilla, Ntambi Baker, Monica A. Ombogo and Daniel Mugalu. 2010. Preliminary studies on fish species composition and feeding habits of two rivers, Rivers Kisian and Awach in the lake Victoria Basin, Kenya. VICRES Fisheries and Aquaculture Cluster Workshop, Mwanza Tanzania.
- ➤ Mugalu Daniel, Benson Mwangi, Grace Gatheri, Abel Shilla and Ntambi Baker, 2010. Fish Market Survey in the Riverine communities within Lake Victoria Basin: A case of Awach Seme and Kisian Riverine communities in Central Nyanza Province, Kisumu-Kenya.
- Abubaker Ntambi, Benson Mwangi, Abel Shilla, Grace Gatheri and Dan Mugalu, 2010. Socio-Economic Condition of Riverine Communities around Rivers Awach and Kisian in Kisumu District, Kenya: Implications for Riverine Fisheries Management.
- ➤ Gatheri G.W. 2010. Improving community livelihoods through management and sustainable utilization of riparian vegetation in the Lake Victoria Region. AWSE conference, Nairobi, Kenya.
- ➤ Ngwiri, J.M., Mbugua, P.K. and Gatheri G. W. Quantitative variation within and among populations of *Sanseviera parva* N.E. Brown and S. Dooneri complex (*Asparagaceae*) in Proceedings, 1st National Biological Postgraduate Students Conference, 2nd-5th August, 2005

Student Co-authored Publications

- ➤ Kirika, P.M; Divakar, P.K; Bauruang, K; Leavitt, S.D; Crespo, A; Gatheri, G. W; Mugambi, G; Bennatti, M.N. and Lumbasch H.T. 2017. Molecular phylogenetic studies unmask overlooked diversity in the tropical lichenized fungal genus *Bulbothrixs*.l. (Pameliaceae, Ascomycota). *Botanical Journal of the LinneanSociety*, 2017, 184, 387-399
- ➤ Kirika, P. M; Divakar, P.K; Crespo, A; Gatheri, G.W; Mugambi, G;Leavitt, S.D;Moncada, B. and Lumbusch H.T. 2016. Molecular data show that *Hypotrachynasorocheila*(Parmeliaceae) is not monophyletic. *The Bryologist*, 119(2):172-180.
- ➤ Kirika, P.M; Divakar, P.K; Crespo,A; Leavitt, S.D; Mugambi G; Gatheri G. W. and Lumbsch; H. T. 2016. Polyphyly of the genus Canoparmelia uncovering incongruencies between phenotype- based classification and molecular phylogeny within lichenized Ascomycota (Parmeliaceae). *Phytotaxa*289(1) 1179-3155
- ➤ Kirika, P.M; Divakar, P.K; Crespo, A; Mugambi, G;Oroko, E.A; Leavitt, S.D; Gatheri, G.W. and Lumbusch, H.T. 2016. Phylogenetic studies uncover a predominantly African lineage in a widely distributed lichen-forming fungal species. *Mycokeys* 14: 1-16.
- ➤ Kirika, P.M; Divakar, P.K; Leavitt, S.D; Buaruang, K; Crespo, A; Mugambi, G; Gatheri, G.W. and Lumbusch H.T. 2017. The genus *Relicinopsis* is nested within *Relicina* (Parmeliaceae, Ascomycota). *The Lichenologist* 49(3): 189-197.
- ➤ Kirika, P.M; Leavitt, S.D; Divakar, P.K;Crespo, A; Gatheri G W; Mugambi, G.andLumbsh, H.T. 2015 The monotypic genus *Bulborrhizina* belongs to *Bulbothrix*sensulato (Parmeliaceae, Ascomycota). *The Bryologist*, 118(2):164-169.
- ➤ Opinde,H.R; Gatheri, G.W. and Nyamache; A.K. 2016. Antimicrobiol evaluation of crude methanolic leaf extracts from selected medicinal plants against *Escherichia coli*. *J. Bacterial Parasitol*. ISSN:2155-9597.
- ➤ Opinde, H. R; Gatheri, G W; Ogola, P.E; Arika, W. M; Wambani, J.R; Kebira, A.K. and Kamau, D.N. 2016. In vitro antifungal activity of leaf extracts from *Aloe secundiflora*, *Bulbinefrutescens*, *Vernonialasiopus* and *Tagetesminuta* against *Candida albicans*. *Med Aromat Plants*, ISSSN:2167-0412MAP
- ➤ Opinde, H.R; Gatheri, G.W. and Nyamache A.K. 2016. Antimicrobial activity of crude leaf extracts from medicinal plants against Enterococcus faecalis. *IJTCM* 1 (2): 0001-0009
- ➤ Opinde, H.R; Nyamache, A.K. and Gatheri, G W. 2018. Antimicrobial activity, Qualitative phytochemical composition of crude leaf extracts from medicinal plants against selected entric bacterial pathogens, Candida albicans. Bioteknologi 15(1) 1-12.

- ➤ Opinde, H. R;Ogola, P.E Arika, W.M; Wambani, J.R; Gatheri, G.W. and Nyamache A.K.2016. Combined Effect of crude leaf extracts of selected medicinal plants against selected pathogens and *Candida albicans*. *J Antimicro* 2:110
- ➤ Uleh, A.M. Newton, L.E; Mbugua, P.K.and Gatheri, G.W.2015.On the ancestryof the tetraploid shrubby Aloes in Kenya. *Haseltonia* 21:56-59
- ➤ Chelashaw, J.M. Kamau F.N. and Gatheri G.W. 2007. A Survey of Some Medicinal Sold in Nairobi. East Afr.J. Bot. 1(1: (46-63).
- ➤ Gitonga, M.N., Gatheri, G.W., Cheruiyot, R., Gitonga, N.M. and Maingi, J.M.2010. Nodulation and Nitrogen Fixation in promiscuous and non-promiscuous soybean (*Glycine max* (L.) Merrill) varieties in Eastern Kenya.
- ➤ Jacinta Emacar, Okemo P.,Gatheri G. and Kariuki S. 2010, Antibiotic resistance patterns of *Escherichia coli* isolated from HIV-sero positive adults at Mbagathi District Hospital, Nairobi, Kenya. J,Appl. Biosci.

Research

- Taxonomic studies on East African genera.
- Ethnobotanical research on medicinal plants.

Funded Projects

- ➤ 2016/2017. Kenyatta university Vice Chancellors research grant. Ethnobotanical Survey, Conservation and Phytochmical Properties of Medicinal Plants used by the Akamba, Machakos, County, Kenya.
- ➤ 2008-2013 Improvement of Riverine Fisheries Productivity and Water Quality in the Lake Victoria Basin Through Weir and Riparian Vegetation Propagation Technologies. B. Mwangi, G. Gatheri, A. Shilla, A. Ntambi and D. Mugalu. Funded by The Inter-University Council of East Africa. Lake Victoria Research Initiative (VICRES)

Conferences/Workshops/Seminars Attended

- ➤ 22nd February 2019. Training of trainer's workshop for staff mentors and growing leaders' facilitators held at Kenyatta University.
- ➤ 22-24th May 2017. Post AETFAT Congress Phylogenetic Training Course held at University of Nairobi.
- February and May 2016. The use of SPSS in data analysis held at Kenyatta University.
- ➤ 26-27th July 2016. Chemical Security and Safety Training facilitated by Civilian Research and Development Foundation (CRDF) held at Kenyatta University School of public health.
- ➤ 14th November 2015. The 5th symposium of the Society for Economic Botany Kenya Chapter (SEB-K) held at Kenyatta University.

- ➤ 11th -12th November 2014. External peer reviewers training held at Kenya school of Monetary Studies. (Commission for University Education).
- ➤ 28th May-14th November 2013. Teaching methodology held at Kenyatta University.
- ➤ 12th -15th December 2010 VICRES Fisheries and Aquaculture cluster workshop, Mwanza, Tanzania
- ➤ 31st August, 2010. Kenyatta University Capacity Building Seminar for Staff Mentors.
- ➤ 18th-20th August 2010: A decade into the 21st century: The Contribution of African Women Scientists and Engineers. Nairobi, Kenya.
- ➤ 10th-14th August 2010. 1st East African Regional Scientific Conference of Pure and Applied Sciences. Kenyatta University, Nairobi, Kenya.
- > 5th-8th July, 2009. VICRES Aquaculture cluster meeting, Arusha, Tanzania
- ➤ 30-31st November 2008. VICRES Lead Scientist Meeting, Entebbe, Uganda
- ➤ 16th-22nd March 2008. VICRES Proposal Writing Workshop Jinja Uganda
- ➤ 29th July, 2008. Training on Curriculum Vitae Writing Skills and Interviews
- ➤ 2008. Mainstreaming of HIV and AIDS in the University Curriculum
- ➤ 6th-7th November, 2008. Relevance of Intellectual Property Rights to Institutions of Higher Learning, Kenyatta University.
- ➤ 10th-13th August 2008 Effective Project Planning and Evaluation in Health Research. Trypanosomiasis Research Centre -KARI.
- ➤ 2005: 1st National Biological Postgraduate Students Conference, Kenyatta University
- ➤ 2004: National Postgraduate Zoological Conference, Kenyatta University
- ➤ 2002: Prota Workshop. World Agroforestry Center, ICRAF, Nairobi
- ➤ 1994: Biotechnology Platform, the way forward since Beijing, Nairobi University
- ➤ 1993: Mapping strategies for the Kenya Association of Women Scientists and Engineers at ICIPE, Kenya
- ➤ 1991: Advances in Labiatae Science, Kew, England,
- ➤ 1984: Planning Fuel wood Projects, Lilongwe, Malawi.

Supervision of Postgraduate Students Ph. D

2017. I84/23317/ 2012, Paul M. Kirika (PhD) Diversity and Molecular phylogenetic analyses of Parmeloid Lichen (Parmeliaceae, Ascomycota) in Kenya

I84/377792/2017, Gertrude V. Evusa (PhD). Phylogeny Taxonomy and conservation of *Kalanchoe*(Crassulaceae),in Tropical Africa.

Masters

- ➤ I56/38344/2016. Valentine Atieno. Morphological and Molecular characterization of cultivated *Dioscore*a species in selected counties in Kenya
- ➤ I56/ CE/34210/2016. Musungu S. Scholar. Documentation and Conservation of Wild edible plants in Bungoma County, Kenya.
- ➤ I56/CE/34256/2016, Agwata Nyabate Delfine. The role of some Medicinal plants in childhood improvement and their Ecological sustainability in Nyamira county, Kenya.
- ➤ I56/CE/26272/2015. Nancy M. Namoyo. Survey of medicinal Plants, their utilization and conservation in Kisii County, Kenya.
- ➤ I56/20520/2012, Hilbert Rachuonyo Opinde. Antimicrobial activity of crude extracts of some medicinal plants against selected entric bacterial pathogens and *Candida albicans*.
- ➤ I56/26638/2011 Ethnobotanical survey and antimicrobial screening of selected medicinal plants used in traditional medicine in Kiambu County, Kenya.
- ➤ I56F/22. N50/CTY/21532/2010, Mamet David Ryan Role of Vernacular Radio Stations in Information Dissemination and Climate Variability Adaptation in Kajiado County Kenya.
- ➤ I56F/22630/2012, Uleh Amodu Mark. On the Ancestry Tetraploid Shrubby Aloes, Kenya.
- ➤ I56/CE//10503/04 Jacinta Emacah (MSc.) Antibiotic susceptibility and Genotypes of *Eschelichia* coli isolated from HIV seropositive adults at Mbagathi Hospital Kenya.
- ➤ I56/5986/03 Fidencio Kinyamu Ndegwa (MSc) Use, Conservation and Harvesting Techniques of Medicinal Plants by the Ogiek of East Mau Forest, Nakuru District, Kenya.
- ➤ I56/7335/02 Jancinta Ngwiri (MSc) Taxonomy and Distribution of Some Kenyan Taxa of the Genus *Sanseviera* Thunb. Asparagaceae Juss.
- ➤ I56/7337/02 Gitonga N. Mawira (MSc). Nodulation and NitrogenFixation in Promiscuous and Non Promiscuous Soybean Varieties Grown in Kenya.

- ➤ I56/10406/07 Abuga Samuel Onyambu (Bed.) Efficacy of Some Medicinal Plants Used by the Samburu Community against Selected Bacteria and Fungi.
- ➤ I56/CE/10166/04 Chemjor Richard Cheboite (BSc.) Antimicrobial Activities of Some Medicinal Plants Used by Tugen Community for the Treatment of Gastrointestinal and Fungal Diseases.

Professional/ Consultancy (Editor/ Peer review in journals, Networks/ Collaborations, External Examiner, Patents)

External Examiner University of Nairobi Jan 2020 PhD Omari Joyce Kanini, MSc thesis: Ms Adeka Joyce Kagai Ms Nyandika Brenda Nyaboke

2014-2018 -Peer Reviewer, Commission for University Education

Community Service and Other Engagements

- > 10th November 2015- To present: Member of Board of Management- Githambia Secondary School.
- ➤ 2008- Present: Member, Board of Management, Githambia secondary school, Thika
- ➤ 2002 2008: Member, Board of Governors, Mount Kinangop Girls' High School.
- ➤ 2004-2008: External Examiner, Kagumo Teachers College, Kenya.
- ➤ 2000 2003: Council member, National Standards Council, Kenya Bureau of Standards, Nairobi.

Affiliation of Professional Bodies

- Member of the African Women in Science and Engineering (AWSE)
- Member: Society of Economic Botany
- Member: African Women in Biosciences Forum
- Peer Reviewer: March 2014- March 2018, COMMISION OF UNIVERSITY

Administrative Positions Held

- ➤ 2013-2018 Deputy Director, Student Affairs, Ruiru Campus.
- ➤ 2010 -To Date -Head, Taxonomy Section
- ➤ 2009- Academic Advisor
- ➤ 2008-2012: Departmental seminars Coordinator
- ➤ 2007- Continuing. Mentor, mentoring Programme

- ➤ 2007-2012 Warden, Women's Halls, Nyayo Hostels
- > August 2004. Placement Committee member
- ➤ August 2003 2004. Warden, Eastern zone, women (Aberdares New and Old).
- ➤ April 2001 June 2007: Departmental Examination Coordinator.
- ➤ April 2001 to June 2007: Chairlady Examination Moderation Committee
- > 2000 2004: Curator: Herbarium.

Recognized university administrative positions

- ➤ 2013-2018 Deputy Director, Student Affairs, Ruiru Campus.
- ➤ 2010 -To Date -Head, Taxonomy Section
- ➤ 2009- Academic Advisor
- ➤ 2008-continuig: Departmental seminars Coordinator
- ➤ 2007- Continuing. Mentor, mentoring Programme
- ➤ 2007- Continuing. Warden, Women's Halls, Nyayo Hostels
- ➤ August 2004. Placement Committee member
- ➤ August 2003 2004. Warden, Eastern zone, women (Aberdares New and Old).
- ➤ April 2001 June 2007: Departmental Examination Coordinator.
- ➤ April 2001 to June 2007: Chairlady Examination Moderation Committee
- > 2000 2004: Curator: Herbarium.

Other administrative positions Held

- ➤ Academic advisor
- > Examination co-ordinator.
- > Curriculum review committee
- > Examination moderation committee member
- ➤ Botanical gardens committee member