

## CURRICULUM VITAE

### PERSONAL DETAILS

**Name:** Prof. Saifuddin F. Dossaji

**Date of Birth:** 20th November 1946

**Birth Place:** Nairobi, Kenya

**Nationality:** Kenyan

**Marital Status:** Married

**Contact details:** 0733 721165 or 0721 727635

**e-mail:** [saifuddin.dossaji@uonbi.ac.ke](mailto:saifuddin.dossaji@uonbi.ac.ke)

**ORCID Id:** 0000-0002-8323-4245, **Google Scholar**

### EDUCATION/QUALIFICATIONS

**Ph.D. – 1974,** University of Texas at Austin, U.S.A.

**M.Sc. – 1970,** University of Nairobi, Kenya.

**B.Sc. – 1968,** University of Poona, India

**G.C. E ‘O’ Level – 1963,** Highway Secondary School, Nairobi< Kenya

### TEACHING and PROFESSIONALEXPERIENCE

<b>April 2015 – Present</b>	Associate Professor, School of Biological Sciences, University of Nairobi
<b>August 2003 – April 2015</b>	Senior Lecturer, School of Biological Sciences, University of Nairobi
<b>Thematic Head</b>	Physiology and Biochemistry
<b>Member of other Thematic areas</b>	Biological Natural Products Plant Taxonomy & Economic Botany
<b>1987 - 2002</b>	Principal Research Scientist & Head of Phytochemistry National Museums of Kenya, Nairobi
<b>1978 - 1987</b>	Senior Lecturer, Dept. of Botany, University of Nairobi
<b>1974 - 1978</b>	Lecturer, Dept. of Botany, University of Nairobi

### AWARDS & FELLOWSHIPS

<b>1987 - 1988</b>	<b>AFGRAD</b> Senior Research Scientist Fellowship AAI/USAID and the Council of Graduate Schools, U.S.A.
<b>1985</b>	British Council Research Fellow, University of Sussex England
<b>1980 - 1981</b>	Alexander von Humboldt Fellowship, Heidelberg, Germany
<b>1968 – 1970</b>	Kenya Government Scholarship, <b>M.Sc.</b> University of Nairobi
<b>1970 - 1974</b>	African Graduate Fellowship ( <b>AFGRAD-AAI/USAID</b> ) <b>Ph.D.</b> University of Texas at Austin, U.S.A.



UNIVERSITY OF NAIROBI



## **DUTIES AND RESPONSIBILITIES**

As a thematic head, oversee academic curriculum development, review and implementation; set School's performance targets as guided by university mission, vision and strategic objectives/plan; supervise academic and support staff. I am involved in teaching and supervision of undergraduate and postgraduate students in my area of specialisation. Currently involved in a number of needs-driven research agenda focusing on harnessing of bioactive plant natural products as a means of cost-effective alternatives for microbial and malarial management and value addition of indigenous medicinal plants.

## **RESEARCH PROGRAMS AND INTERESTS**

- *Biologically active compounds from Kenyan medicinal plants based on an ethnobotanical approach which can be used as a yardstick to identify templates for novel drugs with new mechanisms of action to combat antimicrobial and antimalarial resistant strains.*
- *Bioactivity guided extraction, fractionation and isolation of active constituents of the selected Kenyan medicinal plants as potential candidates with therapeutic value in the treatment of parasitic tropical diseases and as antiinfectives against a wide range of pathogens.*
- *Phytochemical and antifungal evaluation of Kenyan plants in the Management of Food Spoilage and Poisoning Pathogens in Kenya*
- *Biochemical Systematics (Chemotaxonomy). Secondary natural compounds as taxonomic and phylogenetic markers.*

## **SUPERVISION OF CURRENT POSTGRADUATE STUDENTS**

### **Ph.D.**

1. **2017/2018 – Magrate M. Kaigongi**, Antimicrobial activity, phytochemical investigation and toxicity studies of Kenyan medicinal *Zantoxylum* species (Rutaceae), (**co-supervisors**: Dr. C. Lukhoba & Prof. Abiy Yenesew)
2. **2015/2018 - Sida L. Malwey (NRF funded)**, Molecular systematics, phylogeny and taxonomy of Kenyan *Solanum* (Solanaceae), (**co-supervisor**: Dr. C. Lukhoba )
3. **2013/2018 – Catherine Kitonde, (The Gandhi Smarak Nidhi Fund Scholarship)** Phytochemical and antifungal evaluation of three *Vernonia* species in the management of *Fusarium* pathogens affecting wheat production in Kenya. (**co-supervisors**: Dr. C. Lukhoba & Dr. M. Wagacha)

### **CANDIDATES SUPERVISED TO COMPLETION (Ph.D. and M.Sc.)**

- 2017: Ph.D. Musila Muite** Molecular phylogeny, micromorphology, diterpene distribution and antimicrobial activities of leaves of Kenyan *Plecthrantus* species (*Coleus* Clade)
- 2017: Ph.D. Geoffery Kirui** Quantitative assessment of glycoalkaloids, phenolic acids and protease inhibitors in cultivated potato (*Solanum tuberosum* L)
- 2014: -Ph.D. Judith Agot Odhimabo** "Phytochemical and Antifungal Investigation of *Gladiolus* and *Dierama spp* ; in management of opportunistic fungal infections.
- 2000: Ph.D. Rhoda Kariba.** "Antifungal and Phytochemical evaluation of selected Kenyan Medicinal plants".
- 1996: Ph.D. - Helen Oketch,** "Antimalarial and Anti-leishmanial Compounds from selected Kenyan medicinal plants"

- 1993: Ph.D. Dolly Gakunju**, "*New antimalarial drugs of Kenyan plant origin*".
- 2017: M.Sc. - Josphat Kinyua**, An ethnobotanical and chemotaxonomic study of *Catha edulis* (Vahl) Forssk. Ex Endl (Miraa) (Celastraceae)
- 2016: M.Sc. - Martin Muthee Gakuubi**, Evaluation of bioactivity of essential oils of *Tagetes minuta* (Asteraceae) against selected phytopathogenic fungi and bacteria.
- 2016: M.Sc. - Emadeldin Ahmed Elnourani**, Antimicrobial bioactivity and phytochemical analysis of selected medicinal plants from Kenya.
- 2015: M.Sc - Duncan Mutiso Chalo**, Evaluation of antimicrobial activity, toxicity and phytochemical composition of selected medicinal plants based on ethnobotanical study Losho, Narok south County, Kenya.
- 2014: M.Sc. - Jackueline Cherotich**, Antimicrobial activity, acute toxicity and phytochemical screening of four Medicinal plants traditionally used in Sotik District, Kenya
- 2014: M.Sc. - Magrate Muthoni Kaigongi**, Antimicrobial activity, toxicity and phytochemical analysis of four medicinal plants traditionally used in Msambweni District, Kenya.
- 2013: M.Sc. - Caroline Murithi**, Antimalarial activity, acute toxicity and phytochemical screening of selected antimalarial plants
- 2013: M.Sc. - Douglas Ochora**, Antimalarial activity, acute toxicity and phytochemical investigations of plant extracts from Kenya biodiversity
- 2012: M.Sc. - M. F. Musila** *In vivo* Antimalarial activity, toxicity and phytochemical screening of selected antimalarial plants.
- 2012: M.Sc. - S. M. Kariuki**, A Molecular species authentication tool and respective variability in Dioscin levels: A case of *Dioscorea* spp.
- 2012: M.Sc. - Catherine Kitonde**, Antimicrobial and phytochemical analysis of selected medicinal plants from Lake Victoria Basin in Kenya .
- 2011: M.Sc. - A. D. Njoroge**, Screening of *Phyllanthus* spp collected from two ecological regions in Kenya for antimicrobial properties”
- 2009: M.Sc. - Judith Odhiambo**, Ethnobotanical and phytochemical relationships of medicinal plants used in the treatment of fungal infections in Lake Victoria Basin.
- 2002: M.Sc. - Hassan G. Roba**, Ethnobotanical & phytochemical study of medicinal plants of Isiolo District of Kenya.

#### **INTERNAL EXAMINER - Ph.D. / M.Sc. THESIS**

**Musila Muite Ph.D. (December 2107)**, Molecular phylogeny, micromorphology, diterpene distribution and antimicrobial activities of leaves of Kenyan *Plecthrantus* species (*Coleus* Clade)

**James Peter Egonyu Ph.D. (March 2013)** - “Semi-chemicals mediating attraction in the Coreid Bug *Pseudotheraptus wayi* Brown 1955”.

**Duncan Mutiso Chalo M.Sc. (September 2015)**, Evaluation of antimicrobial activity, toxicity and phytochemical composition of selected medicinal plants based on ethnobotanical study Losho, Narok south County, Kenya

**Victor Okello Sirima M.Sc. (August 2014)** - Ehnobotanical and bioactivity study of antihelmintic herbal remedies of Migori County, Kenya.

**Emmah Audrey Owino M.Sc. (November 2013)** – Efficacy of maxim XL 305 FS as a seed dresser in the management of Aspergillus and Aflotoxin contamination in maize.

**Philemon Kibet Langat M.Sc. (October 2013)** – Ethnobotanical study, toxicity and phytochemical screening of selected medicinal plants of Tideret District, Nandi County, Kenya.

**Anthony Njoroge M.Sc. (August 2011)** - “Screening of *Phyllanthus spp* collected from two ecological regions in Kenya for Antimicrobial properties”.

**Judith Odhiambo M.Sc. (2009)** - Antifungal bioactivity and phytochemical relatedness among selected medicinal plants used in treatment of fungal infections in the Lake Victoria Basin, Kenya

**Elizabeth Siameto M.Sc. UON (2009)** - Molecular characterisation and Identification of biocontrol isolates of *Trichoderma harzianum* (Green Mould) from Embu District, Kenya

**B. A. Makumba M.Sc. (2008)** - *In vitro* screening of *Bacillus* strains for antagonism against selected phytopathogenic microorganism and their potential use in biocontrol”

**Margaret A. Odeph M.Sc. (2007)** - “Isolation of soil actinomycetes from different sites and screening for their antimicrobial activity.”

#### **EXTERNAL EXAMINER**

**Ms. Mary Wanyoke M.Sc. UON (1992)** – Studies on leaf-spot diseases of barley and their control using Fungicides.

**Ms. Rhoda Kariba M.Sc. UON (1992)** – Inhibitory effects of *Solanum nigrum* L. extracts on four phytopathogenic species of *Colletotrichum corda*.

#### **Ph.D EXAMINATION BOARD MEMBER (UON)**

Mutisiya Lois Mwikali – March 2017 (Chemistry Dept)

Tsegay Deyou Woldemedihin – October 2015 (Chemistry Dept)

Milkyas Endale Annisa – June 2012, (Chemistry Dept)

Ngera Abdissa Ayana – July 2014, Chemistry Dept)

#### **M.Sc EXAMINATION BOARD MEMBER (UON)**

Bernard Kipengetich – November 2017 (Chemistry Dept)

Emily Okworo – October 2017 (Chemistry Dept)

Tsuma Jenipher Emeti Panyako July 2016 (Chemistry Dept)

Gladys Chebet Too – February 2016 (Chemistry Dept)

Jane Wnjiru Macharia – June 2015 (Chemistry Dept)

Monicah Mirai Mburu – September 2013

Yoseph Atilaw – November 2012 (Chemistry Dept)

Bernard Macharia – October 2012 (Chemistry Dept)

Bernard Kipkirui Rotich – October 2011

Jasper Gichaba Mogote – June 2011

Michael Mumo Musyoki – June 2011, (Chemistry Dept)

Caroline Wanjiru – October 2010

Meron Gebru Beiene – May 2010, (Chemistry Dept)

Maria Goreti Onyango – February 2010

Collins Kalwale Mweresa – May 2009

Ms. Sikulu Maggy – April 2008

Ms. Serah Kanyugo – March 2007

### **SUPERVISION OF 4<sup>TH</sup> YEAR UNDERGRADUATE PROJECTS - SBS**

**December 2016:** Karanja John - Evaluation of antimicrobial activity of crude aqueous and organic extracts of *Colocasia esculata* of family ARACEA.

**December 2016:** Nyaga Eric Muchangi - Investigation of antimicrobial activity of *Gnidia glauca* plant extracts against multi drug resistance *Salomonella typhii*.

**December 2016:** Ngaira Timothy Imbache – Testing the efficacy of organic and aqueous extracts from *Eucurma longa* against food pathogens *E. coli* and *S. aureus*.

**May 2016:** Etere Peter - Evaluation of antimicrobial properties of crude bark extracts of *Bridelia micrantha* against *E. Coli* and *S. aureus*

**May 2016:** Wagah Martin Gorry – Antimicrobail activity of Citrus Limon peel extracts against *E. Coli* and *S. aureus* – an in vitro study

**May 2016;** Eva Gathoni Gichinga – Antibacterail activity of black pepper and turmeric extracts on pathogenic bacteria *E. Coli* and *S. aureus*

**May 2016:** Mwangi Elias – Study of antimicrobial properties of Amaranthus against *S. aureus* in Kenya

**May 2015:** Ojiambo V. Wafula – In vitro antibacterial activity of Mimosa pudica leaf extract

**May 2015:** Erick Mureithi – In vitro assay of antibacterial effect of Neem tree crude bark extract on selected bacteria.

**May 2015:** Kimani D. Mwangi – In vitro antibacterial activity of Rosa-sinensis flower extract against human pathogens .

**May 2014:** Ocheing K. Keegan – To determine antibacterial & antifungal properties of *Datura*

**May 2014** – Kamau Richard – Investigation of antimicrobial effects of Honey on gram +ve and –ve bacteria .

**June 2013:** Singa M. Henry – Testing for antimicrobial properties of Neem (*Azadirachta indica*) tree leaf extract.

**June 2013:** Bethwel K. Kosgei – Antimicrobial activity of *Tithonia diversifolia* against *E. coli* & *S. aureus* associated with stomach aches.

**June 2013:** Kobia J. Makinga – Antimicrobial properties of extracts of latex of *Jatropha curucura* against bacterial wouns.

**June 2012:** Otieno Louis – Biological activity of methanol and water extracts from *Croton megalocarpus*

**June 2011:** Mukere C. Kihuni – Phytochemical screening, antifungal and antimicrobial assay of crude extracts from leaves, roots and bark of *Tylosema fassoglensis*

## **INSTITUTIONAL COLLABORATIVE LINKS**

**Prof. Abey Yenesew** : Chemistry Department, UON

**Dr. J. M. Nguta**: Department of Public Health, Pharmacology and Toxicology, College of Agriculture and Veterinary Sciences, UON

**Dr. Festus M. Tolo**: Centre for Traditional Medicine & Drug Research Kenya Medical Research Institute (KEMRI)

Dow AgroSciences, USA

**Host to Fullbright Scholar - October 2011 to July 2012** - Dr. Carrie Waterman, University of the Sciences in Philadelphia, Philadelphia, PA 19139 USA.

## **MEMBERSHIP PROFESSIONAL / SCIENTIFIC ASSOCIATIONS**

Natural Products Research Network for East and Central Africa (**NAPRECA**)

Society for Economic Botany - Kenya Chapter

## **TEACHING DUTIES - UNDERGRADUATE & POSTGRADUATE**

### **Undergraduate**

- *Basic Metabolism*
- *Plant Biochemistry*
- *Proteins and Enzymes*
- *History and Philosophy of Biology*
- *4<sup>th</sup> year research projects (Microbiology& Biotechnology)*

### **Postgraduate**

- *Biochemical Systematics*
- *Secondary Plant Metabolism*
- *Medicinal & Poisonous Plants*

## **ADMINISTRATIVE EXPERIENCE & RESPONSIBILITIES**

### **Committee Member - School of Biological Sciences:**

- Assisting the Director for ISO audit and surveillance
- Curriculum & Development
- SBS Strategic Planning Committee
- UON/UNES, Biological Sciences Consultancy Thematic Team
- Calendar and Brochure

### **Committee Member - UON**

#### **Committee Chairman (appointed by V.C.) – August 2016**

Technical evaluation for purchase of automated high performance liquid chromatography system (HPLC) system for the School of Pharmacy.

**Committee Chairman (appointed by V.C.) – June 2014**

Technical evaluation for supply of refrigeration equipment for the pilot refrigeration system in the Department of Food Science, Nutrition and Technology

**Committee Chairman (appointed by V.C.) – September 2013**

Technical evaluation for supply, installation and commissioning of Flame Compact Spectrophotometer for atomic absorption and atomic emission with external PC control and evaluation software for department of LARMAT at the College of Agriculture and Veterinary Sciences.

**Committee Chairman (appointed by V.C.) – June 2013**

Technical evaluation for supply and installation and commissioning of gas chromatograph coupled to mass spectrometer (GC-MS) system for the School of Pharmacy.

**WORKSHOPS AND TRAINING ATTENDED at UON**

**November 7, 2016 and 3<sup>rd</sup> May 2017** – Staff Training on Postgraduate Tracking System

**October 24, 2016** – Joint Writers Workshop for CBPS

**March 21, 2016** - Training in Research Grant Management Information System (RGMIS)

**February 3, 2016** – Training on TURNITIN & sensitization on Open Researchers and Contributors ID (ORCID)

**April 26<sup>th</sup>, 2015** – Training on Google Scholar Account

**February 26, 2013** - Training on New Website Profile Update

**February 13, 2013** - SBS Examinations Workshop

**March 15, 2012** - Training on how to update profiles and upload course material and publications

**October 26, 2012** - Workshop on strengthening of UNES/UON Consultancy

**March 28, 2012** - Training of Staff on Information Systems & Security Measures

**March 19, 2012** - Research & Grant Proposal Writing

**October 15, 2010** - Training on corruption awareness,

**September 29, 2009** - Training on Financial management,

**October 25, 2007** - Training on transformative leadership and results based management

**September 24, 2007** - Training in Pedagogy



## **RESEARCH GRANTS AND FELLOWSHIPS**

**2011/2012 - Deans committee grant.** Antifungal Investigations of *Gladiolus* and *Dierama spp* against opportunistic fungi (**Judith Odhiambo**, Dr. S. F. Dossaji, Dr. C. Lukhoba, Prof Abey Yewensu)

**2010/2011 - Vicres Project : Participant & Co-ordinator** (Late Prof. G.I Siboe & Dr. C. Lukhoba). "Bioactivity and value-added processing of medicinal plant products for the management of HIV/AIDS fungal infections in Lake Victoria Basin".

**2009: Dean's Committee Research Grant** –(Dr. B. Anyango & Late Prof. E. Akunda). "Screening of *Phyllanthus spp.* collected from three regions in Kenya for Anti-Microbial properties".

**1989** Recipient of **Alexander von Humboldt** equipment grant of **DM 60,000** for the National Museums Phytochemistry Laboratories.

**1988** AAI/USAID **visiting senior research scientist** at the University of Texas at Austin USA - Collaborative research on Plant Neurotoxins.

**1987** **WHO research equipment grant through the TDR program of \$20,000**, for Phytochemistry Department, National Museums of Kenya.

**1987** **AAI/USAID** visiting senior research scientist, Phytochemistry and Toxicology Laboratories University of California, Irvine, U.S.A "Chemistry of Medicinal Plants used by Non-Human Primates". **(4 months)**

**1986** **UNDP/World Bank/WHO visiting research scientist**, Institute of Pharmacognosy and Phytochemistry, University of Lausanne, Switzerland, collaborative research on antifungal and molluscicidal compounds from Kenyan plants. Participated in the international symposium on "Biologically Active Natural Products" **(2 months)**

**1985** **British Council Research Fellow** for the study of bioassay systems to evaluate the use of plant molluscicides in the control of schistosomiasis. University of Sussex, England. **(3 months)**

**1983** **UNEP/University of Texas visiting research scientist**, Phytochemical Laboratories, Austin. Phytochemical research on members of the family Compositae with special emphasis on bioactive compounds and plant biotechnology. **(2 months)**

**1981** **Resumption of AvH fellowship** at University of Heidelberg. "C-glycoside flavanoids of *Phorodendron* growing on difference host trees". **(3 months)**

**1980** **Sabbatical Leave - Alexander von Humboldt Fellow (AvH)**, Institute für Pharmazeutische Biologie, University of Heidelberg, W. Germany "Isolation and HPLC quantitative determination of Valapotriates (irridoids) from *Valeriana* species".

**1978-1982** University of Nairobi **research grant**. "The distribution of toxins in the leaves of *Acacia* and *Crotalaria* (Leguminosea) in Kenya

**1976-1984** International Foundation for Science (**IFS - SWEDEN**) **research grant** "Chemical and Pharmacological Study of Certain Indigenous Medicinal and Poisonous plants of Kenya.

**1975 -1980** University of Nairobi research grant. "Chemical survey of medicinal and poisonous plants of East Africa".

## ACADEMIC PUBLICATIONS

- 1) Kirui G.K., **S.F. Dossaji** & N.O. Amungune (2018), Changes in Phytochemical content during different growth stages in tubers of five varieties of Potato (*Solanum tuberosum* L.), Current Research in Nutrition and Food Science, 6 (1): 1-11
- 2) Musila M.F., J.M. Nguta, C.W. Lukhoba & **S.F. Dossaji** (2017), Antibacterial and antifungal activities of 10 Kenyan *Plectranthus* species in the *Coleus* clade, Journal of Pharmacy Research, 11(8): 1003-1014
- 3) Musila M.F., C.W. Lukhoba, J.M. Nuuta, & **S.F. Dossaji** (2017), Phylogeny of Ten Kenyan *Plectranthus* Species in the *Coleus* Clade Inferred from Leaf Micromorphology, *Rbcl* and *MatK* Genes, Journal of Botany, Volume 2017, 1-16
- 4) Gakuubi M.M., J.M. Wagacha and **S. F Dossaji** & W. Wanzala, (2016), Chemical composition and antifungal activity of essential oils of *Tagetes minuta* (Asteracea) against selected phytopathogenic fungi, American Journal of Essential Oils and Natural Products; 4(3): 16-26
- 5) Gakuubi M.M., J. M. Wagacha and **S. F Dossaji** & W. Wanzala, (2016), Chemical composition and antibacterial activity of essential oils of *Tagetes minuta* (Asteracea) against selected pathogenic bacteria, International J. of Microbiology, (Volume 2016),1-9
- 6) Kiunga, J., C. Lukhoba, **S. F. Dossaji** & A. Yenesew, (2016), A Survey of Traditional Medicinal Uses of *Catha Edulis* (Celastraceae) in Meru and Embu Counties of Kenya, International Journal of Ethnobiology & Ethnomedicine, 3 (1).1-12
- 7) Gakuubi M.M., W. Wanzala, J.M. Wagacha and **S. F Dossaji** (2016), Bioactive properties of *Tagetes minuta* L. (Asteraceae) essential oils: A review, American Journal of Essential Oils and Natural Products; 4(2): 27-36
- 8) Chalo M., C. W. Lukhoba, **S. F. Dossaji** , J. M. Nguta (2015), In vitro antimicrobial activity of selected medicinal plants traditionally used in Losho, Narok County, Kenya. International Research Journal of Pharmacy 6 (12): 797-801
- 9) Kaigongi M.M., **S.F. Dossaji**, J. M. Nguta, C. W. Lukhoba, F. M. Musila (2014), Antimicrobial Activity, Toxicity and Phytochemical Screening of Four Medicinal Plants Traditionally Used in Msambweni District, Kenya, Journal of Biology, Agriculture and Healthcare 4, (28): 6-12.
- 10) Ochora D. O., **S.F. Dossaji**, J. M. Nguta & E. M. Akunda (2014), Antimalarial activity and acute toxicity of four plants traditionally used in treatment of malaria in Msambweni District, Kenya, European International Journal of Science and Technology, 3 (7): 31-40
- 11) Odhiambo J. A., **S.F. Dossaji**, C. W. Lukhoba & Y. Abiy (2014), Antifungal activity, brine shrimp cytotoxicity and phytochemical screening of *Gladiolus watsonoides* Baker (Iridaceae), Journal of Pharmacy Research, 8 (9):1218-1222.
- 12) Kitonde C. K., **S.F. Dossaji**, C. W. Lukhoba and M. M. Jumba (2014) Antimicrobial activity and phytochemical screening of *Senna didymobotry* used to treat bacterial and fungal infections in Kenya. International Journal of Education and Research 2 (1 ): 1-12
- 13) Kitonde C. K., **S.F. Dossaji**, C. W. Lukhoba and M. M. Jumba (2014). Phytochemistry and Utilization of *Vernonia glabra* (Steetz) Oliv. & Hiern.in Management of Food Spoilage and Poisoning Pathogens, in Kenya. European International Journal of Science and Technology (3) 1: 65-72

- 14) Murithi C.K., **S.F. Dossaji**, J.M. Nguta and C.W. Lukhoba (2014), Antimalarial activity and *in vivo* toxicity of selected medicinal plants naturalised in Kenya, International Journal of Education and Research, (2) 5:395-406
- 15) Odhiambo J. A., **S.F. Dossaji**, C. W. Lukhoba and Yenesew Abiy (2014), Phytochemical screening of *Dierama cupuliflorum* Klatt. (Iridaceae), Journal of Pharmacy Research 8 (4): 589-592.
- 16) Kitonde C. K., **S.F. Dossaji**, C. W. Lukhoba and M. M. Jumba (2013) Antimicrobial Activity and Phytochemical study of *Vernonia glabra* (Steetz) Oliv. & Hiern in Kenya, Afr J Tradit Complement Altern Med. 10 (1):149-157
- 17) Musila M. F., **S.F. Dossaji**, J.M. Nguta, C.W. Lukhoba & J.M. Munyao, (2013) *In vivo* Antimalarial activity, Toxicity and Phytochemical Screening of Selected Antimalarial Plants, J. of Ethnopharmacology, 146: 557-561
- 18) Njoroge D. B. Anyango, **S.F. Dossaji** (2012), Screening of *Phyllanthus* Species for Antimicrobial Properties, Chemical Sciences Journal, CSJ-56: 1-12
- 19) Odhiambo J. A., C. W. Lukhoba & **S. F. Dossaji** (2011), **Review Article**, Evaluation of Herbs as potential Drugs/Medicines. Afr. J. Traditional, Complimentary and Alternative Medicines, 8 (S): 144-151
- 20) Odhiambo J. A., G.M. Siboe, C.W. Lukhoba & **S.F. Dossaji** (2010), Antifungal activity of crude extracts of *Gladiolus dalenii* Van Geel (Iridaceae). Afr. J. Traditional, Complimentary and Alternative Medicines, 7 (1): 53-58.
- 21) Odhiambo J.A., G.M. Siboe, C.W. Lukhoba & **S.F. Dossaji** (2009), Antifungal activity of crude extracts of selected medicinal plants used in combinations in Lake Victoria Basin, Kenya. Plant Product Research Journal, 13: 35-43.
- 22) Kariba, R.M., Siboe, G.M. and **Dossaji, S.F.** (2001), *In vitro* antifungal activity of *Schizogygia coffaeoides* Bail. (Apocynaceae) extracts. Journal of Ethnopharmacology, 74: 41-44.
- 23) Oketch-Rabah H.A., **Dossaji S.F.** & Mberu E.K. (1999), Antimalarial Activity of Some Kenyan Medicinal Plants. Pharmaceutical Biology (formerly International Journal of Pharmacognosy) 37: 329-334
- 24) Oketch-Rabah H. A., C.S. Brogger, K. Frydenvang, **S. F. Dossaji** & T.G. Theander, (1998), Antiprotozoal properties of 16, 17 dihydroxybrachyalyxolide from *Vernonia brachyalyx*, Planta Medica, 64 (6): 559-562.
- 25) Oketch-Rabah H. A & **S. F. Dossaji**, (1998), Molluscicidal activity of some Kenyan medicinal plants, S. Afr. J. Sci. 94 (6): 299-301
- 26) Oketch H.A., **S.F. Dossaji**, S. Brogger Christensen, Karla F. Demrang, E. Lemmich, Claus Cornett, Carl E. Olsen, Ming Chen, Arsalan Kharazmi & Thor G. Theander, (1997), Antiprotozoal Compounds from *Asparagus africanus*, J. Nat. prod., 60: 1017-1022.
- 27) Oketch H.A., E. Lemmich, **S.F. Dossaji**, Thor G. Theander, Carl E. Olsen, Claus Cornett, Arsalan Kharazmi & S. Brogger Christensen (1997), Two new Antiprotozoal 5-methylcoumarins from *Vernonia brachyalyx*, J. Nat. Prod. 60: 458-461.
- 28) Gakunju, D.M., E. Mberu, **S.F. Dossaji**, I. Gray, R.D. Waigh, P.G. Waterman & W.M. Watkins, (1995), Potent Antimalarial Activity of the Alkaloid Nitidine, isolated from a Kenyan Herbal remedy, Antimicrobial Agents & Chemotherapy, 39: 2606.-2609

- 29) Schiff C.J. and **S.F. Dossaji (1991)**, Ecdysteroids as regulators of host and parasite interactions: A study of interrelationships between *Shistosoma mansonii* and the host snail *Biomphalaria glabrata*; Trop. Med. Parasitol., **42**: 11-16.
- 30) **Dossaji, S.F.**, R.W. Wrangham and E. Rodriguez **(1989)**, selection of plants with medicinal properties by wild chimpanzees; Fitoterapia, **60**: 378-380.
- 31) Adolf, W., E.H. Seip, **S.F. Dossaji** and E. Hecker **(1988)**, Irritant Principles of Mezereon Family (thymeleaceae), New skin irritants and tumour promoters of the daphnane and 1, 2-alkyldaphnane type from *Synaptolepis kirkii* and *S. Retusa*; J. of Nat. Prod., **51**: 662-674
- 32) Marston, A., F. Gafner, **S.F. Dossaji** and K. Hostettmann **(1988)**, Fundigicidal and moluscicidal saponins from *Dolichos kilimandascharicus*; Phytochem., **27 (5)**: 1325-26.
- 33) Adolf, W., **S.F. Dossaji**, E.H. Seip and E. Hecker **(1985)**, Skin irritant diterpene orthoesters of the daphanane type from *Peddiea africana* and *P. Volkensii*, Phytochem., **24 (9)**: 2047.-2049
- 34) **Dossaji S.F.** and H. Becker and J. Exner **(1983)**, Flavone C-glycosides of *Phorodendron tomentosum* form different host trees, Phytochem., **22 (1)**: 311-312
- 35) **Dossaji S.F.** and H. Becker **(1981)**, HPLC-quantitative determination of valepopriates in *Valeriana kilimandascharica*, Planta Medica, **43 (10)**: 179-182
- 36) **Dossaji, S.F.** and I. Kubo **(1980)**, Quercetin 3-(2"-Galloylglucoside), a molluscicidal flavanoid from *Polygonum senegalense*: Phytochem., **19**: 482-483
- 37) **Dossaji S.F.** and E.A. Bell **(1980)**, Distribution and significance of amino acids in the leaves of *Acacia* and *Crotalaria* (Leguminosae) Kenya J. of Science and Technology, **1**: 19-22
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## **CONFERENCE PAPERS/POSTERS**

Odhiambo JA, Lukhoba CW, **Dossaji SF. (2017)** "Corms as an additional feature to identify *Galdiolus* spp ". **XXI Association for the taxonomic study of the flora of tropical Africa Congress (AETFAT)** . Catholic University of Eastern Africa, Nairobi, Kenya. 15<sup>th</sup> to 19<sup>th</sup> May.

Musila FM, Lukhoba CW, **Dossaji SF**, Nguta JM. (2017) "Molecular Phylogeny of ten Kenyan *Plectranthus* species in the Coleus clade.". **XXI . Association for the taxonomic study of the flora of tropical Africa Congress (AETFAT)**Catholic University of Eastern Africa, Nairobi, Kenya., 15<sup>th</sup> – 19<sup>th</sup> May

Kitonde C. K., **S.F. Dossaji**, C. W. Lukhoba, J. M. Wagacha, C. Klittich, D. Hahn, F. Serge and P. Graupner (2016), Phytochemical and antifungal evaluation of *Vernonia glabra* leaves in the management of fungal pathogens affecting staple cereal production in Kenya, **Sigma Xi Scientific Research Society's annual meeting and research symposium**, Atlanta, Georgia, USA: November 9-13.

Gakuubi M., J M. Wagacha, **S F. Dossaji** and W Wanzala (2016), Chemical composition and antifungal activity of essential oils of *Tagetes minuta* (Asteraceae) against selected phytopathogenic fungi, **Nairobi Innovation Week**, University of Nairobi

Chalo M., C. W. Lukhoba, **S. F. Dossaji** , J. M. Nguta (2015), Evaluation of Antimicrobial activity, Toxicity and Phytochemical composition of selected medicinal plants of Losho, Narok county, Kenya, **Nairobi Innovation Week.**, University of Nairobi.

Lukhoba C. W. , **S.F. Dossaji**, Judith Odhiambo (2013), Non Communicable Diseases and their Management in the Lake Victoria Basin, Kenya, **The First International Conference on Pesticidal Plants**, International Centre for Insect Physiology and Ecology (ICIPE), Nairobi, 21st - 24th January

Kitonde C. K., **S.F. Dossaji**, C. W. Lukhoba, & M. M. Jumba (2013) Phytochemistry and Utilization of *Vernonia glabra* in Management of Food Spoilage and Food Poisoning Pathogens in Kenya . **The First International Conference on Pesticidal Plants**, International Centre for Insect Physiology and Ecology (ICIPE), Nairobi, 21st - 24th January

Odhiambo J. A., C. W. Lukhoba & **S.F. Dossaji (2011)**, Ethnomedicinal knowledge in the traditional management of human ailments in Lake Victoria Basin, Kenya. **14th NAPRECA Symposium and AAMPS Ethno-veterinary Medicine Symposium, ICIPE**, 8-12<sup>th</sup> August

Kariuki S. M., D. J. Kim, **S.F. Dossaji** and J.M. Kabaru (2011), Molecular species identification and the respective quantification of dioscin: A case of *Dioscorea* spp. Poster Presentation at **14th NAPRECA Symposium and AAMPS Ethno-veterinary Medicine Symposium, ICIPE**, 8-12<sup>th</sup> August

Kitonde C., C.W. Lukhoba & **S.F. Dossaji (2011)**, Antimicrobial and Phytochemical Study of *Vernonia glabra* (Steetz) Oliv. & Hiern. in Kenya. **Society for Economic Botany Symposium**, St. Louis, Missouri, USA. 9 -13 July

Odhiambo J.A., W. Lukhoba & **S.F. Dossaji (2010)**, Ethnomedicinal knowledge in traditional management of human ailments in Lake Victoria Basin, Kenya, **51<sup>st</sup> annual Meeting of the Society for Economic Botany**, Veracruz, Mexico.

Oketch-Rabah H. A., S B. Christenson, **S. F. Dossaji**, Chen Ming, Carl Olsen, Claus Cornett, T. G. Theander, Arsalan Kharzami and E. Lemmich, (1995), Phytochemical prospecting Leishmanicidal activity of selected Kenyan medicinal plants. Proceedings of 6<sup>th</sup> NAPRECA symposium, Kampala, Uganda.

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Gakunju, D.M., **S.F. Dossaji**, D. Laur, P.G. Waterman, I. Gray, W.M. Watkins, D.M. Kariuki, J. Mwangi and E. Mberu **(1994)**, New antimalarial drugs of Kenyan plant origin: A traditional approach; International Research Congress on Natural Products, Halifax, Nova Scotia, Canada.

**Dossaji S.F. (1994)**, "Phytochemical Prospecting & Biodiversity" at the **Regional Workshop** on Cooperation in Biodiversity Research & Training held at The Centre for Biodiversity, National Museums of Kenya.

Oketch H., **S.F. Dossaji** and L. Newton **(1991)**, Phytochemical investigation of Kenyan *Aloes* for commercial preparations, Proc. of 4th NAPRECA Symposium, Addis Abbaba, Ethiopia.

**Dossaji S.F.** and I. Kubo **(1977)**, further evaluation of the molluscicidal properties of *Polygonum senegalense*. 1st Joint Symposium - Phytochemical Society of Europe and North America, Ghent, Belgium.

**Dossaji S.F. (1976)** On the evaluation of the molluscicidal properties of *Polygonum senegalense forma senegalense*. "International Congress for Research on Medicinal Plants", Munich, W. Germany.

## CONFRENCES/SYMPOSIA ATTENDED

- 2017** 7th symposium of the society for economic botany – Kenya chapter, 16<sup>th</sup> December, School of Biological Sciences, University of Nairobi. 16<sup>th</sup> December
- 2017** XXI Association for the taxonomic study of the flora of tropical Africa congress (AETFAT) . Catholic University of Eastern Africa, Nairobi, Kenya. 15<sup>th</sup> to 19<sup>th</sup> May.
- 2015** Society of Economic Botany (SEB) – Kenya Chapter, Plants Utilization for Traditional or Modern Products, 5<sup>th</sup> Annual symposium, Kenyatta University, 14<sup>th</sup> November
- 2014** Society of Economic Botany (SEB) – Kenya Chapter, Plant-People Interaction, 4th Annual symposium, National Museums of Kenya, 22<sup>nd</sup> November
- 2013** The First International Conference on Pesticidal Plants, International Centre for Insect Physiology and Ecology (ICIPE), Nairobi, 21st - 24th January
- 2013** Society of Economic Botany (SEB) – Kenya Chapter, Plant-People Interaction, 3<sup>rd</sup> Annual symposium, School of Biological Sciences, UON. 16<sup>th</sup> November
- 2012** Society of Economic Botany (SEB) – Kenya Chapter, 2<sup>nd</sup> Annual Symposium, Plant-People Interaction, Kenyatta University. 25<sup>th</sup> October
- 2011** 14th NAPRECA Symposium and AAMPS Ethno-veterinary Medicine Symposium, International Centre for Insect Physiology and Ecology (ICIPE), 8-12<sup>th</sup> August.
- 2011** Society of Economic Botany (SEB) – Kenya Chapter, 1<sup>st</sup> Symposium, CBPS, Chiromo, UON, 23<sup>rd</sup> June
- 1990** International Symposium on the Biology & Chemistry of Natural Products, Bonn, Germany
- 1989** Kenya Museum Society and American Society of Pharmacognosy conference grant - “Research Congress on Natural Products”, University of Puerto Rico.
- 1984** University of Nairobi and UNESCO conference grant to attend “5th Asian Symposium on Medicinal Plants and Spices” Seoul, Republic of Korea.
- 1983** USAID (Kenya) conference grant for U.S.-Mexico symposium on “Renewable Phytochemicals of the Desert” University of California, Irvine.
- 1980** Alexander von Humboldt conference grant to attend the “International Research Congress on Natural Products as Medicinal agents”, Strasbourg, France
- 1978** University of Nairobi and IFS conference grant to attend a meeting entitled “Topics in Biochemistry of Natural Products”, Oklahoma State University, U.S.A.
- 1977** University of Nairobi and United Nations Environment Program (UNEP) conference grant to attend the 1st joint international symposium on “The Biochemistry of Plant Phenolics”, Ghent, Belgium
- 1976** International Congress for Research on Medicinal Plants, Munich, Germany



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