

# **Curriculum Vitae Leonel Moiana**

**- March 2021 –**

(+258) 848698273 or (+258) 861912834

[leonel.moiana@gmail.com](mailto:leonel.moiana@gmail.com)

[leonel.moiana1@yahoo.com.br](mailto:leonel.moiana1@yahoo.com.br)

## **Education and Training, Experience, Teaching Objectives, and Research Interests**

### **Education**

B.Sc. – Plant production and protection, Eduardo Mondlane University – Maputo, Mozambique, 2005.

M.Sc. – Genetics and Breeding, Estadual de Maringá University-Maringa, Brazil, 2011.

Dr.Sc. – Genetics and Breeding, Estadual de Maringá University-Maringa, Brazil, 2015.

### **Additional Professional Training**

Training course on Cotton Breeding and Technology for Development Countries at Shijiazhuang city, province of Hebei, Popular Republic of China, 2007.

International Training Program in Molecular Biology of Cotton at Department of Plant and Soil Science, Texas Tech University, Lubbock, Texas, United States of America, 2014.

Training Workshop on “Socio-Ecological Challenges in Agricultural Systems of Zambia and Mozambique” and to the Grant Application at the DFG Head Office in Bonn, Germany, 2017.

Training Workshop on “Development of Sustainable Transgenic Technology, Commercialization and Post release Monitoring” Ankara, Turkey, 2018.

Training on Advanced Rice Production and Post-production system for IIAM scientists, Lagunas, Philippines, 2019.

### **National Professional Experience**

Teacher of Physics. Santo António da Malhangalene Comunitary School-Maputo, 2003 to 2006.

Research Assistant. Department of Agronomy and Natural Resources, Institute for Agrarian Research of Mozambique. Assistance and management of crop trials belongs for cotton, maize, sorghum, cowpea, Sesame, (Namialo, Namapa, Montepuez, Morrumbala-Mozambique), from the

soil's ploughing until harvesting, from 2006.

Senior Research. Department of Agronomy and Natural Resources, Mozambique Agriculture Research Institute. Supervising, assistance and management of crop trials and experiments belongs for cotton, cassava, and rice (Namialo, Montepuez, Mogovolas, Nicoadala, and Namacurra), from the soil's ploughing until harvesting, from 2015.

Senior Researcher. Laboratory Microsatellite Markers Analyst. Laboratory of Biotechnology at Regional Centre of leadership for Rice, Rice Production and Post-production system, since 2019.

### **International Professional Experience**

Research Assistant. Department of Agronomy and Natural Resource, Institute for Agrarian Research of Mozambique. Assistance and management of crop trials for cassava, maize, soybean and beans (Maringa- Brazil), cotton, castor, safflower and Sesame (Texas-USA), from the soil's ploughing until the harvesting, since 2009.

Visiting Research Scholar. PhD Sandwich in Genetics and Breeding, Department of Plant and Soil Sciences, Texas Tech University-Lubbock, USA, from March 2014 to January 2015.

Laboratory Microsatellite Markers Analyst. Biotechnology Laboratory of NUPAGRI, Brazil, Department of Plant and Soil Sciences, Texas Tech University, USA and Laboratory of Molecular Biology at Nampula-Mozambique, from 2010 to 2019.

### **Research Interests**

The main thrust of my research effort is that of improving farm and peasant level decision making by the consideration of the impacts of emerging technologies, genetics and breeding, postharvesting and Agro-processing, environmental and resource constraints that are likely to affect agricultural producers and society at large.

### **Referred Journal Articles**

Lobato, A.K.S. Neto , M.A.M., Meirelles , A.C.S., Silva , L.I., Marochio, C.A., Monteiro, E.R. Neto , H. Z., Maleia, M.P., Moiana, L.D., Bronzato, A.R. and Cruz, F.J.R. Relationship between leaf relative water content and total soluble protein in soybean exposed to short water deficit. Research Journal of Biological Sciences, Vol. 4(9), pp. 1061-1067, 2009. DOI:10.3923/rjbsci.2009.1061.1067.

Maleia, M. P. Vidigal Filho, P.S., Gonçalves-Vidigal, M. C., Gonela, A., Lacanallo, G. F., Moiana, L.D., Chamuene, A., de Sousa, L. L., Darben, L. M. Genetic divergence among African and American cotton (*Gossypium hirsutum* L. race *latifolium* H.) cultivars inbred lines through random amplification of polymorphic DNA (RAPD) markers. African Journal of Biotechnology, Vol. 9(50), pp. 8539-8548, 13 December, 2010.

Moiana, L.D.; Vidigal-Filho, P.S.; Vidigal, M.C.G.; Lacanallo, G.F.; Carvalho, L.P.; Maleia, M.P.; Pacheco, C. M.; Ribeiro, T.; Neto, H. Z.; Coimbra, G. K. Genetic diversity and population structure of cotton (*Gossypium hirsutum* L. race *latifolium* H.) using microsatellite markers, African Journal of Biotechnology, Vol. 11(54), pp. 11640-11647, July 2012.

Juliana P. P., Gonçalves- Vidigal, M.C., Vidigal, M.C.G., G. K. Coimbra, L. D. Moiana, P. S. Vidigal Filho, Giselly F Lacanallo. Promising genotypes of common bean in relation to grain yield and resistance to anthracnose in Maringa and Umuarama Counties. International Journal of Food, Agriculture and Environment, Journal of Food Agriculture and Environment, 11:110117, 01/2014.

Moiana, L.D.; Vidigal-Filho, P.S.; Vidigal-Goncalves, M.C.; Maleia, M.P.; Mindo, N. Application of mixed models to assess genotype and environment interactions in cotton (*Gossypium hirsutum*) cultivars in Mozambique, African Journal of Biotechnology, Vol.13(19) , pp. 1985-1991 , May 2014.

Moiana, L.D.; Vidigal Filho, P.S.; Gonçalves-Vidigal, M.C.; Carvalho, L. P. Genetic diversity and population structure of the upland cotton Brazilian cultivars (*Gossypium hirsutum* L. raça *latifolium* H.) using SSR markers. Australian Journal of Crop Science, 9:143-152, 2015.

Silva, L. I.; Vidigal Filho, P. S.; Costa, T. R.; Moiana, L.D.; Gonçalves-Vidigal, M. C. Molecular characterization of traditional sweet cassava accessions from the periurban region, Toledo, Western Paraná, Southern Brazil, Global Journal of Bioscience, 4: 1268-1278, 2015.

Ferreira<sup>1</sup>, R. C. U.; Vidigal Filho, P. S.; Gonçalves-Vidigal, M. C.; Moiana, L. D.; Kvitschal, M. V. Genetic and population structure of sweet cassava (*Manihot esculenta* Crantz) germplasm collected from Campo Grande, Mato Grosso do Sul, Brazil , Australian Journal of Crop Science, 9 :458-467, 2015.

Ortiz, A. H. T.; Rocha, V. P.C.; Moiana, L. D.; Gonçalves-Vidigal, M. C.; Galván, M. Z. ; Vidigal Filho, P. S. Population Structure and Genetic Diversity in Sweet Cassava Cultivars from Paraná, Brazil. Plant Molecular Biology Report, 1-14, 2016. DOI 10.1007/s11105-016-0995-x.

Gonçalves, T. M.; Vidigal Filho, P. S.; Gonçalves Vidigal, M. C.; Ferreira, R. C. U.; Rocha, V. P. C.; Ortiz, A. H. T.; Moiana, L. D.; Kvitschal, M.V. Genetic diversity and population structure of traditional sweet cassava accessions from Southern of Minas Gerais State, Brazil, using microsatellite markers. African Journal of Biotechnology, Vol. 16(8), 346-358, 2017.

Maleia, M. P.; Raimundo, A.; Moiana, L. D., Teca, J. O.; Chale, F.; Jamal, E.; Dentor, J. N.; Adamugy, B. A. Stability and adaptability of cotton (*Gossypium hirsutum* L.) genotypes based on AMMI analysis. Australian Journal of Crop Science, Vol. 11(04):367-372, 2017.

Valentini, G.; Gonçalves-Vidigal, M. C.; Elias, J. C. F.; Moiana, L. D.; Mindo, N. N. A. Population Structure and Genetic Diversity of Common Bean Accessions from Brazil. Plant Molecular Biology Reporter, <https://doi.org/10.1007/s11105-018-1129-4>.

### **Abstracts of Refereed Presented Manuscripts**

Moiana, L.D. Effect of mineral fertilizers on the tomatoes, variety VFN, in the soil with manures of cow. IV seminary of Research at UEM, September 2005. (Speech).

Moiana, L.D.; Vidigal-Filho, P.S.; Vidigal-Goncalves, M.C.; Maleia, M.P.; Mindo, N. Application of mixed models to assess genotype and environment interactions in cotton

(*Gossypium hirsutum*) cultivars in Mozambique, African Journal of Biotechnology, Vol.13(19) , pp. 1985-1991. Brazilian Congress of Plant breeding, Uberlandia-Brazil, August, 5 to 8, 2013.

Moiana, L.D.; Vidigal-Filho, P.S.; Vidigal, M.C.G.; Lacanallo, G.F.; Carvalho, L.P.; Maleia, M.P.; Pacheco, C. M.; Ribeiro, T.; Neto, H. Z.; Coimbra, G. K. Genetic diversity and population structure of cotton (*Gossypium hirsutum* L. race *latifolium* H.) using microsatellite markers, African Journal of Biotechnology, Vol. 11(54), pp. 11640-11647, July 2012. 12<sup>th</sup> Meeting of the Southern and Eastern Africal Cotton Forum (SEACF), July, 16 to 19, 2014 (Speech).

Moiana, L.D.; Vidigal-Filho, P.S.; Vidigal-Goncalves, M.C.; Maleia, M.P.; Mindo, N. Application of mixed models to assess genotype and environment interactions in cotton (*Gossypium hirsutum*) cultivars in Mozambique, African Journal of Biotechnology, Vol.13(19) , pp. 1985-1991 , May 2014. 12th Meeting of the Southern and Eastern African Cotton Forum (SEACF), July, 16 to 19, 2014. (Speech).

Moiana, L. D.; Auld, D. L.; Vidigal Filho, P. S.; Gonçalves-Vidigal, M. C.; Venongupal, M. Screen of US cotton germplasm for complementarity with African cotton germplasm to ensure success, WCRC–6 and Biannual Conference of ICGI, Goiânia-Brazil, May, 2 to 6, 2016. (Speech).

Moiana, L. D.; Auld, D. L.; Vidigal Filho, P. S.; Gonçalves-Vidigal, M. C.; Venongupal, M. Screen of US cotton germplasm for complementarity with African cotton germplasm to ensure success, Academic Symposium on Agriculture Innovation, Side-Event to the Global Research Council Africa Regional Meeting, Maputo-Mozambique, November, 22 to 24, 2016 (Speech).

Moiana, L. D.; Auld, D. L.; Vidigal Filho, P. S.; Gonçalves-Vidigal, M. C.; Venongupal, M. Screen of US cotton germplasm for complementarity with African cotton germplasm to ensure success, Workshop on “Socio-Ecological Challenges in Agricultural Systems of Zambia and Mozambique” and to the Grant Application at the DFG Head Office in Bonn, Germany, 12 to 14 July of 2017 (Speech).

Moiana, L. D.; Faftine, O. L.; Highlights of Biotech Status-OFAB-ARPM: Case of Mozambique, OFAB Annual Review and Planning Meeting & OFAB Africa Media Awards in Mombasa, Kenya, November 18 – 22, 2019 (Speech).

### **Services and projects:**

- Official of Agrarian Technology of Nampula/Department of Rural Extension/ Direction of Agriculture of Nampula Province, since December 2015 to August 2020.
- Coordinator of a project “Genetic Diversity and Population Structure of Cotton Cultivars through SSR and ISSR markers/FNI”, from 2015 to 2018.
- Collaborator with TAKFORDET CONSULTANCY BV on the project “Evaluation of addition of Linamarase on Total Content of Cyanogenic Glycosides in Cassava Products” from 2019 to August 2020.
- Member/Facilitator of INGC and PNUD, during the training of Risk and Disaster Reduction/Adaptation to climate changes, for Permanent Secretaries, Administrators and Planner/Managers from Districts, from 2016 to 2017
- Member of Scientific Council of IIAM/CZnd/Nampula, from 2016 to August 2020.
- Member of Collective of a Direction of DPASA/Nampula, from 2015 to August 2020.
- Supervisor and evaluator of Agriculture activities realized directors and farmer in all districts of Nampula Province, from 2015 to August 2020.
- Supervisor, Co-Supervisor and Committee member of undergraduate and Master students from Unilurio/Nampula, UCM/Niassa and ISPM/Manica, since 2015.
- Evaluator of Research Proposals submitted to National Research Funding/FNI/MCTESTP for grant support, since 2019.
- Leader of Biotechnology on Research Centre of Excellence of Rice/Namacurra/Zambézia, Since August of 2020.
- Scientific Coordinator on Research Centre of leadership for Rice/Namacurra/Zambézia, since August of 2020.

Computer Software knowledge. Excel, PowerPoint, Word, SAS, Genes, R-3.1.1, Structure, InStruct, Clumpp, Distruct, Genalex, Powermarker, Mapmarker, Selegen, Gqmol, QTLchart.

I have routinely correct more than 500 scientific articles submitted to reputable academic journals such as African Journal of Biotechnology, Theoretical Applied Genetics, Australian journal of crop science, Plant Molecular Biology Report, Global Journal of Bioscience, Scientia, Genetics and Molecular Research, Plant Molecular Biology Report and others. In addition, I use to collaborate with grant agencies reviewing the project such as Leap-Agri/EU.

#### Persons for Reference

1.Dr Pedro Soares Vidigal Filho

[vidigalfilhop@gmail.com](mailto:vidigalfilhop@gmail.com)

2. Dr Maria Isabel Andrade

[m.andrade@cgiar.org](mailto:m.andrade@cgiar.org)

3.Dr Olga da Lurdes Faftine

[faftine@yahoo.com](mailto:faftine@yahoo.com)