

## CURRICULUM VITAE (2017)

### 1.0 PERSONAL DATA

**Name:** Revocatus Petro Mushumbusi (PhD)

**Sex:** Male

**Marital status:** Married

**Position:** Centre Director

**Nationality:** Tanzanian

**Address:** Tanzania Forestry Research Institute (TAFORI), Mufindi Pulpwood Research Centre, P.O. Box 45, Mafinga, Tanzania.

**Telephone /Mobile Number:** +255 754 819623; +255 786 547035

**E-mail:** [mushumbuz2002@yahoo.co.uk](mailto:mushumbuz2002@yahoo.co.uk); [revomushumbusi@gmail.com](mailto:revomushumbusi@gmail.com);  
[revocatus.petro@tafori.or.tz](mailto:revocatus.petro@tafori.or.tz)

### 2.0 OVERVIEW

Dr. Revocatus Petro Mushumbusi is a Research Scientist with fifteen (15) years' experience on forestry research particularly on Forest health. He has done a lot of researches on identifying sources of death of trees in different forest plantations. His current research interests includes identifying possible control methods of different insect pests affecting forest plantations and carrying out a comprehensive soil survey to determine status of soils in forest plantations for land suitability mapping. He has also experiences on forest utilization researches. He has published about 13 papers in local and international journals.

### 3.0 PROFESSIONAL QUALIFICATIONS

2011 – 2015: PhD at Sokoine University of Agriculture (SUA)

**Thesis:** Effects of Eucalyptus gall wasp, *Leptocybe invasa* (Hymenoptera: Eulophidae) on growth and wood basic density of some *Eucalyptus* species, Tanzania.

2006 – 2009: MSc. Degree in Forestry at Sokoine University of Agriculture (SUA)

**Thesis:** Status of Pine woolly aphid (*Pineus boernerii*?) in Sao-hill Forest Plantation, Southern Highlands, Tanzania.

1999 – 2002: BSc. degree in Forestry at Sokoine University of Agriculture (SUA)

**Thesis:** Natural regeneration of miombo tree species; A case study of Kitulungalo Forest Reserve, Morogoro, Tanzania.

### 4.0 COMPUTER LITERACY

Microsoft word, Microsoft Excels, SAS, SPSS, Minitab 15 Software.

### 5.0 LANGUAGES

Fluent in both spoken and written Swahili and English.

### 6.0 SUMMARY OF EMPLOYMENT

**6.1 Employer:** Tanzania Forestry Research Institute (TAFORI) since 2003.

#### 6.2 Administrative and research experience

- 2015 – to date – Centre Director, Mufindi Pulpwood Research Centre.
- 2009 – 2012 – Acting Head of Centre, Moshi Timber Utilisation Research Centre.
- 2003 - 2008 - Forest Research Officer, Moshi Timber Utilisation Research Centre.

### 7.0 MEMBERSHIP

- Secretary, Tanzania Forest Health Forum since December,2011
- Member, Management Committee-TAFORI 2015 to date
- Tanzania Association of Foresters (TAF)
- Researchers Academicians & Allied Workers Union (RAAWU)

## 8.0 RESEARCH PROJECTS/CONSULTANTS UNDERTAKEN

- 2017 - Determination of wood properties for lesser known indigenous timber species from some forest reserves in Lindi, Mtwara and Ruvuma regions in Tanzania. Funded by Tanzania Forest Services (TFS) Agency
- Identification of the cause of death of trees *Cupressus lusitanica* in West Kilimanjaro Forest Plantation, Tanzania. Funded by TFS
- 2016 - Investigating the cause of the observed death of *Pinus patula* tree species and carrying out a comprehensive soil survey at Mbizi Forest Plantation in Rukwa Region, Tanzania. Funded by TFS
- 2013 - Effects of Eucalyptus gall forming wasp, *Leptocybe invasa* Fisher & La Salle (Hymenoptera: Eulophidae) infestation on growth and wood basic density of some *Eucalyptus* species in Tanzania. Funded by Tanzanian Commission for Science and Technology.
- 2013 - Strengthening Capacity on Identification, Controlling and Monitoring of Forest Insects, Diseases and Soil Problems in Forest Plantations in Tanzania. Funded by Tanzania Forest Fund.
- 2013 - Identification of the cause of death of trees in West Kilimanjaro, Meru/Usa and Shume Forest Plantations. Funded by TFS.
- 2009 - Community based Conservation of *Oxystigma msoo* tree species in Rau Forest Reserve, Kilimanjaro, Tanzania. Funded by Rufford Small Grants.
- 2008 - Population structure and phenological patterns of *Ficalhoa laurifolia* in Tanzania montane forests. Funded by AFFORNET.
- 2007 - Assessment of the status of Pine Woolly Aphid in Sao Hill Forest Plantation, Southern Highlands, Tanzania. Funded by Belgian Technical Cooperation (BTC).

## 9.0 PUBLICATIONS

### 9.1 Journal Publications

- 9.1.1 R. Petro**, A. Mpiri and A. Mkude (2017). Susceptibility of *Eucalyptus* Species and Clones to Red Gum Lerp Psyllid, *Glycaspis brimblecombei*, (Hemiptera: Psyllidae) in Mbizi Forest Plantation, Tanzania. *International Journal of Environment, Agriculture and Biotechnology* 2(1): 417-420.
- 9.1.1 **R. Petro** and S. Iddi (2017). *Leptocybe invasa* and Its Effects on Young Plantations of Commercial *Eucalyptus* Species in Tanzania. *International Journal of Agriculture and Forestry* 7(1): 23-27
- 9.1.2 R. Petro**, O. A. Ndomba, M. Y. Chidege, F. Laswai, G. Nyaradani (2016). Basic Density and Its Variation in *Olea capensis* Established in Matrix with *Grevillea robusta* Grown in Meru-Usa Forest Plantation, Tanzania. *International Journal of Agriculture and Forestry* 6(1): 8-11.
- 9.1.3** Laswai, F., Mbwambo, L., **Petro, R.**, Mpiri, A., Balama, C., Msalilwa, U., Faraji, N. and Nyaradani. G. (2015). Some physical and strength properties of immature *Pinus patula* trees in Iringa and Njombe regions, Tanzania. *Journal of Forestry and Nature Conservation* 84(2): 5 - 12.
- 9.1.4** O. A. Ndomba, S. Bakengesa, **R. Petro**, J. Maguzu, S.A.O. Chamshama, H.R. Kiimu and M. Lema. (2015). Perils of Taungya to the Productivity of Forest Plantations and Need for Modification: Case Study of Meru Forest Plantation in Tanzania. *International Journal of Agriculture and Forestry* 5(5): 267 - 275.
- 9.1.5 R. Petro**, F. Laswai, M. Mijai, G. Nyaradani, C. Balama. (2015). Factors Affecting

Tree Husbandry and Woodlots Establishment in Kilimanjaro Region, Tanzania. *Open Journal of Soil Science* 5: 169-180.

- 9.1.6 Petro, R.**, Madoffe, S.S., Iddi, S. & Mugasha, W. A. (2015). Impact of Eucalyptus gall wasp, *Leptocybe invasa* Fisher & La Salle (Hymenoptera: Eulophidae) infestation on growth and biomass production of *Eucalyptus grandis* and *E. saligna* seedlings in Tanzania. *International Journal of Pest Management* 61(3): 220-227.
- 9.1.7 R. Petro**, F. Laswai, M. Mijai, G. Nyaradani, C. Balama. (2015). A Review on Tree Species Suitability for Wood Fuel in Kilimanjaro Region. *Journal of Environment and Earth Science* 5(7): 23 – 27.
- 9.1.8 Petro, R.**, Madoffe, S.S. and Iddi, S. (2014). Infestation Density of Eucalyptus Gall Wasp, *Leptocybe invasa* Fisher and La Salle (Hymenoptera: Eulophidae) on Five Commercially Grown *Eucalyptus* Species in Tanzania. *Journal of Sustainable Forestry* 33:276–297.
- 9.1.9 Petro, R.**, Madoffe, S.S. & Iddi, S. (2014). Effects of Eucalyptus gall wasp, *Leptocybe invasa* Fisher & La Salle (Hymenoptera: Eulophidae) on wood basic density of three *Eucalyptus* species in Tanzania. *Ethiopian Journal of Environmental Studies & Management* 7(4): 434 - 444.
- 9.1.10 R. Petro** and S.S. Madoffe. (2011). Status of Pine Woolly Aphid (*Pineus boernerii*) in Sao-Hill Forest Plantation, Tanzania. *Journal of Entomology*, 8(5): 468-475.
- 9.1.11 Mndolwa, M.**, Japhet, E., **Petro, R.** and Solomon, S. (2011). Impact of human activities for ten years on forest trees at Ruvu North Forest Reserve, Tanzania. Paper accepted for publication in *International Journal of Environmental Studies*, (Paper No: INT – 2011 - 103).
- 9.1.12 R. Petro**, J.R. Bakari and M.A. Mndolwa. (2010). Population structure and phenological patterns of *Ficalhoa laurifolia* in Tanzania montane forests. *International Journal of Agriculture*, 2(5): 77 – 81.

## **9.2 Newsletter series/Working conference papers**

- 9.2.1 **Petro, R.** Richard, J., Maduka, S. and Bakengesa, S. (2013). *Zonocerus variegatus* (Orthoptera: Pyrgomorphidae): A pest of economic importance to the *Pinus patula* in Ukaguru Forest Plantation, Tanzania. *TAFORI Newsletter*, Vol. 7(2): 26 – 31.
- 9.2.2 **Petro, R.** and Mndolwa, M. (2013). Heartwood, sapwood and bark proportions of 83 years old *Olea capensis* grown in Meru Forest Plantation, Tanzania. *TAFORI Newsletter*, Vol. 7(1): 6 – 10.
- 9.2.3 Laswai, F. F., Mbwambo, L., **Petro, R.** and Nyaradani, G. (2013). Determination of Basic Density of *Vitex keniensis* Grown in Kilimanjaro, Tanzania. *TAFORI Newsletter*, Vol. 7(1): 11 – 17.
- 9.2.4 Laswai, F. F., Mbwambo, L., **Petro, R.** and Nyaradani, G. (2013). Basic Density of 43 years old *Acrocarpus fraxinifolius* Grown in the Southern slope of Mount Kilimanjaro, Tanzania. *TAFORI Newsletter*, Vol. 7(1): 18 – 24.
- 9.2.5 **Petro, R.**, Pima, N.E., Nyaradani, G.K. and Shangali, C.F. (2013). Growth performance of *Oxystigma msoo* at Rau Forest Reserve in Kilimanjaro and in Trial Plot in Lushoto, Tanzania. *TAFORI Newsletter*, Vol. 7(1): 25 – 30.
- 9.2.6 O.A. Ndomba, I. Aloo and **R. Petro**. (2011). Forest plantation diseases in Tanzania. In: *Proceedings of the Workshop on Insect Pests, Diseases and Soil Problems in Forest Plantations*. (Edited by Nshubemuki et al.), 3rd - 4th February, 2011, Kibaha, Tanzania. 38 – 44pp.
- 9.2.7 **R. Petro** and S.S. Madoffe. (2011). Status and impact of conifer aphids in forest plantations in Tanzania. In: *Proceedings of the Workshop on Insect Pests, Diseases and Soil Problems in Forest Plantations*. (Edited by Nshubemuki et al.), 3rd - 4th February, 2011, Kibaha, Tanzania. 18 – 26pp.

- 9.2.8 S.S. Madoffe **and R. Petro**. (2011). Status of forest insect pests in Tanzania: Introduction, spread, damage and management options. In: *Proceedings of the Workshop on Insect Pests, Diseases and Soil Problems in Forest Plantations*. (Edited by Nshubemuki *et al.*), 3rd - 4th February, 2011, Kibaha, Tanzania. 2 – 16pp.
- 9.2.9 **R. Petro**. (2009). Community based Conservation status of *Oxystigma msoo* tree species in Rau Forest Reserve, Kilimanjaro, Tanzania. [http://www.ruffordsmallgrants.org/rsg/projects/revocatus\\_mushumbusi\\_petro](http://www.ruffordsmallgrants.org/rsg/projects/revocatus_mushumbusi_petro).
- 9.2.10 Balama, C., **Petro, R.**, Uisso, A. and Magulukwenda, G. (2009). The role of women in gum trading toward poverty reduction and sustainable forest management in Kishapu and Igunga Districts, Tanzania. In: *Proceedings of the First Participatory Forest Management (PFM) Research Workshop: Participatory Forest Management for improved Forest Quality, Livelihood and Governance*. (Edited by Nshubemuki *et al.*), 15th - 16th December 2008, Morogoro, Tanzania. 80 – 90pp.
- 9.2.11 Bakari, J. R., **Petro, R.**, Laswai, F., Moshi, E. and Mijai, M. (2006). Timber harvesting wastage in North Kilimanjaro (Rongai), SUA Training, Meru/USA and West Kilimanjaro Forest Plantations, Tanzania. *TAF Newsletter*, Vol. 4(1): 13-22pp.
- 9.2.12 Mndolwa, M., Mbwambo, L., **Petro, R.** and N. Magogo, (2006). Comparison of shrubs and tree species diversity and equitability between public land and Mkomazi-Umba game reserve: a case of Antakae 7 and Mnyandege villages, Lushoto Tanzania. In: Nikundiwe, A. M and JDL, Kabigumila (Eds.), 2006. *Proceedings of the RPSUD Workshop*, June 2006 Arusha Tanzania, 214-217pp.
- 9.2.13 **R. Petro**, E.J. Luoga and M. Mndolwa, (2005): Natural regeneration of miombo tree species; A case study of Kitulanhalo Forest Reserve, Morogoro, Tanzania. *TAFORI Newsletter*, Vol. 5 (1): 2 – 7.
- 9.2.14 Mbwambo, L., Mndolwa, M. A., **Petro, R.**, Balama, C. and Mugasha, W. (2005). *Boswellia neglecta*: a neglected source of valuable resin (Frankincense) for rural economy in Tanzania. *TAFORI/CMEAMF Newsletter: Special Issue*. Vol. 5(2): 25-30.

## 10.0 TECHNICAL REPORTS/EDITED REPORTS

- i. **Petro, R.** (2010). Community based conservation status of *Oxystigma msoo* tree species in Rau Forest Reserve. Final Report Submitted to the Rufford Small Grants Foundation.
- ii. **Petro, R.** (2009). Assessment of population structure, regeneration capacity and phenology of *Ficalhoa laurifolia* in Tanzania montane forests. Final Report Submitted to African Forest Network (AFORNET).
- iii. Bakengesa, S., **Petro, R.**, Madoffe, S.S., Chamshama, S.A.O., Ndomba, O.A. and Lema, M. (2015). Forest Health Forum: Strengthening Capacity on Identification, Controlling and Monitoring of Forest Insects, Diseases and Soil Problems in Forest Plantations in Tanzania. Report Submitted to the Tanzania Forest Fund, Dar Es Salaam. 37pp.
- iv. **Petro R.** and Mpiri A. (2017). The cause of altered growth of *Pinus patula* & *Grevillea robusta* trees at Kawetire Forest Plantation, Mbeya. Report Submitted to the Tanzania Forest Service Agency, Dar Es Salaam. 8pp.
- v. **Petro, R.**, Ndomba, O.A. and Mpiri, A (2016). Soil survey for land suitability mapping for Mbizi Forest Plantation, Sumbawanga. Technical Report submitted to the Tanzania Forest Services Agency, Dar Es Salaam. 36pp
- vi. **R. Petro**, O. A. Ndomba and A. Mpiri (2016). The cause of altered growth of *Pinus patula* trees at Mbizi Forest Plantation, Sumbawanga. Technical Report Submitted to the Tanzania Forest Services Agency, Dar Es Salaam. 19pp.
- vii. **R. Petro**, O. A. Ndomba (2017). Investigation on the death of trees (*Pinus patula*) in West Kilimanjaro Forest Plantation. Technical Report Submitted to the Tanzania Forest Services Agency, Dar Es Salaam. 22pp.

- viii. Ndomba, O.A. and **Petro, R.** (2012). Disease survey regarding to death of black wood (*Acacia melanoxylon*) and silk oak (*Grevillea robusta*) in Meru-Usa Forest Plantation. Technical Report Submitted to the Tanzania Forest Services Agency, Dar Es Salaam. 23pp.
- ix. Mallya, B., **Petro, R.**, Chale, A., Ghaji, H. (2017). Rapid Appraisal for Mpepo Proposed Forest Plantation Nyasa District, Ruvuma Region. Report Submitted to the Tanzania Forest Services Agency, Dar Es Salaam. 21pp.

#### 11.0 WORKSHOP / TRAINING / SEMINARS ATTENDED

- i. Building Strong Universities in Developing Countries PhD course; Simulation Modelling in the Environmental Sciences, Sokoine University of Agriculture, Tanzania in 2012.
- ii. Consultant skills development held at Tushikamane Centre, Morogoro, Tanzania in 2010.
- iii. IUFRO Working party 7.02.02 Workshop; Recognition, Identification and Management of Pests and Diseases of Tropical Plantation and Forest Trees – Kampala, Uganda in 2010.
- iv. Workshop on Biodiversity Indicators Capacity Strengthening (BICSAfrica). 3RD Eastern Africa Workshop – Nairobi, Kenya in 2010.
- v. Workshop on Biodiversity Indicators Capacity Strengthening (BICSAfrica). Eastern Africa Workshop II – Nairobi, Kenya in 2009.
- vi. Diploma in Agricultural and Natural resources transformation for Improved livelihoods at Norwegian University of Life Sciences (UMB), Aas, Norway in 2008.
- vii. China TCDC International Training Course on Bamboo Technology” held at China National Bamboo Research Centre at Hangzhou – Zhejiang Province, People’s Republic of China, 2004.

Signature



Date 13/10/2017

**Dr. Revocatus Petro Mushumbusi**