

Leoka Phillip Mphuthi

10 Arnoldstad road • Rustenburg, 0300 • (+27) 7133-81043 • MphutiL@arc.agric.za

PROFILE

Highly organized and diligent professional with ten years of experience as a field and laboratory Plant Pathology Research Technician contributing to smooth and productive operations in the various research projects. Competent in my field of work and this includes competencies such as job knowledge, professionalism, problem-solving, pressure tolerance and outstanding leadership. Collaborate cross-functionally across organizational levels to contribute to income generation through research proposal writing, conducting research and disease diagnostics. Respect, confidence, responsibility, adaptability and resilience are part of my strong capabilities.

- Core Competencies -

- Trial management
- Oral and written communications
- Leadership skills
- Data collection, capturing and processing
- Customer service
- Office administration
- Positive teamwork and collaboration
- Disease diagnostics
- Training and facilitation
- Computer literacy

- Brief personal details-

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|--------------------|---------------|
| • Citizenship | South African |
| • Identity number | 8211045289084 |
| • Driver's license | Code C1 |
| • Race | African |
| • Marital status | Married |

- Language skills-

- | | |
|-------------|---|
| • English | Speak (good); Read (good); Write (good) |
| • Afrikaans | Speak (good); Read (good); Write (good) |
| • Sesotho | Speak (good); Read (good); Write (good) |
| • Setswana | Speak (good); Read (good); Write (good) |

PROFESSIONAL EXPERIENCE

Agricultural Research Council – Vegetables Industrial and Medicinal Plants, Rustenburg, NW.
Research Technician (June 2011 – Present)

Supports all Plant Pathology research projects at ARC- VIMP Rustenburg. Project leader/co-project leader for all previous tobacco cultivar evaluation projects (plant pathology and plant breeding) of the ARC since 2016. Selected responsibilities include:

- Writes and contributes to writing research proposals.
- Compile and manage project budgets and procurement plan; carry out purchases.
- Plans and co-ordinates own and technical project activities.

- Independently carries out and manage research trials (field, glasshouse/greenhouse and laboratory)
- Carry out disease surveys and diagnostics
- Involved in farmer training and support activities
- Collects, captures, and interprets data; makes internal project recommendations
- Compiles detailed technical and client annual reports and submits for approval
- Writes and publish popular publications as main author and/or co-author
- Ensures compliance with SHE/OHS policies and procedures
- Identifies needs for human resource, supervise, train and motivates subordinates
- Conducts team performance evaluation

INCOTEC South Africa, Pietermaritzburg, KZN.

Technical Support - Intern (September 2010 – May 2011)

Supported all laboratory and field research technical activities. Selected responsibilities included:

- Seed treatment with pesticides.
- Seed film coating with film coating polymers
- *In vitro* seed germination tests
- Involved in field trial planning/establishment and management
- Data collection, capturing and processing
- Basic laboratory activities (sanitation/disinfection, stock taking, sample preparation and equipment calibration)

EDUCATION

University of Kwa Zulu-Natal, Pietermaritzburg, KZN

Enrolled for Master of Science in Plant Pathology (MSc Plant Pathology) – Completed all experimental work and currently writing up dissertation

- Project title: Detection and characterization of *Potato virus Y* strains infecting cultivated tobacco in South Africa

North West University (Main campus), Potchefstroom, NW

Honours Bachelor of Science in Environmental Sciences (BSc Hons): 2012 - 2013

- Majoring in Plant Pathology and Entomology (Crop Protection)

University of Freestate (Main campus), Bloemfontein, FS

Bachelor of Science in Agriculture (BSc Agric): 2005 - 2009

- Majoring in Agronomy, Entomology and Plant Pathology

COURSES ATTENDED

Publishing with impact and a route to open access

Springer Nature (Virtual): 2021

Step-by-step guide on how to prepare a successful paper

Springer Nature (Virtual): 2020

Facilitation skills for effective community engagement in primary agriculture

Agricultural Research Council: 2019

Introductory molecular biology training course

Agricultural Research Council: 2016

First aid training course (Level 1).

2019

Introductory mycology training course.

Agricultural Research Council: 2014

Occupational Health and Safety training course.

2014

Irrigation and fertigation training course.

2013

Genstat statistical program training course.

Agricultural Research Council: 2012

Seed treatment, polymer film coating, sampling and germination test training.

INCOTEC – Netherlands: 2010

RESEARCH PROJECTS SUPPORTED

Research projects as project leader

Tobacco cultivar evaluation for disease tolerance (2016 - 2021):

- Evaluation of tobacco breeding lines for tolerance to black shank disease caused by *Phytophthora nicotianae*
- Evaluation of tobacco breeding lines for tolerance to powdery mildew disease caused by *Erysiphe cichoracearum*
- Evaluation of tobacco breeding lines for tolerance to angular leaf spot disease caused by *Pseudomonas syringae*
- Evaluation of tobacco breeding lines for tolerance to *Tobacco mosaic virus*
- Detection of Potato virus Y strains infecting cultivated tobacco in South Africa
- Seedling disease survey and diagnostic project

Research projects as co-project leader

Tobacco cultivar evaluation for yield and quality (2017 - 2021):

- Evaluation of flue-cured and air-cured tobacco breeding lines for yield and quality

PUBLICATIONS

Popular publication written and published

- Sutherland, R., Mulabisana, J. and **Mphuthi, L.P.** 2021. Problems with your plants? Contact our diagnostic centre for solutions. ARC-VIMP Newsletter: No.9.
- **Mphuthi, L.P.** and Truter M. 2021. Screening tobacco seedlings at commercial nurseries for diseases. ARC-VIMP Newsletter: No.6.
- **Mphuthi L.P.** 2020. Important viruses of cultivated tobacco: Warning to tobacco farmers. NuFarmer SA 24(1), 6-7.
- **Mphuthi, L.P.** 2017. *Tobacco Mosaic Virus*: Symptoms, transmission and management. Farmer's Weekly, (17014), 60 –61.
- **Mphuthi, L.P.** and Tesfagiorgis, H.B. 2015. *Potato Virus Y*: farming for tomorrow. Farmer's Weekly, (15035), 26-26.

CONFERENCES ATTENDED

CORESTA AP 2019 Conference

Attended CORESTA's Agronomy, Leaf integrity, Phytopathology and Genetics conference at Victoria falls, Zimbabwe 13-17 October 2019

51st Annual Congress of the Southern African Society for Plant Pathology (SASPP)

Poster presentation: Evaluation of air-cured and flue-cured tobacco breeding lines for tolerance to black shank disease caused by *Phytophthora nicotianae*

35th Congress of the Southern African Society for Agricultural Technologists (SASAT)

Paper presentation: Evaluation of air-cured and flue-cured tobacco breeding lines for tolerance to black shank disease caused by *Phytophthora nicotianae*

34th Congress of the Southern African Society for Agricultural Technologists (SASAT)

Paper presentation: Survey of Potato virus Y strains infecting tobacco in flue-cured tobacco producing areas of South Africa

33th Congress of the Southern African Society for Agricultural Technologists (SASAT)

Paper presentation: The effects of aphid numbers and alternative hosts on the incidence and epidemics of *Potato virus Y* in tobacco fields

MEMBERSHIP

Southern African Society of Plant Pathology (SASPP)
South African Society for Agricultural Technologists (SASAT)
South African Council for Natural Scientific Professionals (SACNASP)

REFERENCES

Mr Lawrence Malinga

Research Entomologist
South African Sugarcane Research Institute
084 900 9262

Dr Gabriel Lebaka

Plant Breeder
South African Breweries
0740473609

Mr Maanda Nevhutanda

Acting Facility Manager
ARC-VIMP/ARC-PHP
0790537251

Prof Augustine Gubba

Plant Virology Professor
University of Kwa Zulu-Nata
0823126755
