



Tafadzwanashe Mabhaudhi

30 – 08/02/1983

Crop Science

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Zimbabwe

I am a young Crop Scientist with specialisation in crop modelling (plant-water relations), irrigation design and management, crop production and seed technology. I am development oriented, with a huge passion for working with communities. My research focus is on underutilised, indigenous and traditional food crops as well as indigenous knowledge systems in relation to food security, climate change and rural development.

CURRENT RESEARCH

Topic	Methodology	Application
Water use of indigenous food crops	<ul style="list-style-type: none">Controlled and field experimentOn-farm trialsInstrumentation (soil water content sensors, automatic weather stations, canopy analysers, leaf porometers, chlorophyll meters, schollander chamber, plant efficiency analysers, root scanners)Biometry – data analyses	<p>Crop models for underutilised crops (AquaCrop, APSIM, CROPSYST, DSSAT & SWB)</p> <p>Models can be used as decision support tools in crop production and policy formulation.</p>

UKZN main Publications

Mabhaudhi, T., Modi, A.T. and Beletse, Y.G. 2013. Response of taro (*Colocasia esculenta* L. Schott) landraces to varying water regimes under a rainshelter. *Agricultural Water Management* 121, 102-112.

Mabhaudhi, T. and Modi, A.T. 2013. Growth, phenological and yield responses of a bambara groundnut (*Vigna subterranea* L. Verdc) landrace to imposed water stress: I. Field conditions. *South African Journal of Plant & Soil* 30, 69-79.

Mabhaudhi, T., Modi, A.T. and Beletse, Y.G. 2013. Growth, phenological and yield responses of bambara groundnut (*Vigna subterranea* L. Verdc) landraces to imposed water stress: II. Rain shelter conditions. *Water South Africa* 39, 197-198.

Walker, S., Bello, Z., Mabhaudhi, T., Modi, A.T., Beletse, Y.G., and Zuma-Netshiukhwi, G., 2013. Calibration of AquaCrop Model to predict water requirements of African vegetables. *Acta Hort.* 1007: 943-950.

Past Researches

Modi, A.T. and Mabhaudhi, T. 2013. Water use and drought tolerance of selected traditional and indigenous crops. Final Report of Water Research Commission Project K5/1771//4. WRC Report No. 1771/1/13, ISBN 978-1-4312-0434-2. Water Research Commission, Pretoria, South Africa.

Future Interests

1. Up-scaling of crop models and linking them with GIS applications

Extra Interests

Sport (soccer, cricket, tennis), socialising