

MSc candidate in Biological Sciences (UCT)

Genome-size effects on plant ecophysiology & phenology in Cape schoenoid sedges

Principal supervisor: Prof A.M. Muasya. Co-supervisors: Prof G.A. Verboom & Prof A.G. West

BSc Hons in Biological Sciences (UCT) *With distinction* 2017

Supervisors: Prof M.D. Cramer & Prof G.A. Verboom

BSc in Ecology & Evolution, Applied Biology (UCT) 2016

With distinction in both majors & the degree

Skills

Strong speaker, design, data visualisation

Languages

English, Afrikaans, R, bash

Tools

R Markdown, L^AT_EX, git, GitHub, MS Office

Methods

Statistical modelling, data manipulation, GIS (in R), functional programming

Publications

Van Mazijk, Cramer, & Verboom. Environmental heterogeneity explains contrasting plant species richness between the South African Cape & southwestern Australia. 2021

J. Biogeogr. 48:1875–1888. DOI: 10.1111/jbi.14118.

Elliott, **van Mazijk**, Barrett, Bruhl, Joly, Muthaphuli, Wilson, & Muasya. Global dispersal & diversification of the genus *Schoenus* (Cyperaceae) from the Western Australian biodiversity hotspot. 2021

J. Syst. & Evol. 59(4):791–808. DOI: 10.1111/jse.12742

Elliott, Laidler, Muasya, Muthaphuli & **van Mazijk**. Solving the sedge mystery. *Veld & Flora* 105(3):20–25. 2019

Cramer, Wootton, **van Mazijk** & Verboom. New regionally-modelled soil layers improve prediction of vegetation type relative to that based on global soil models. 2019

Divers. & Distrib. 25(11):1736–1750. DOI: 10.1111/ddi.12973.

Van Mazijk, Smyth, Weideman & West. Isotopic tracing of stormwater in the urban Liesbeek River. 2018

Water SA 44(4):674–679. DOI: 10.4314/wsa.v44i4.16.

Workshop instruction

Postgraduate

MSc Student Bursary (SAAB, inaugural recipient) 2018, 2019
Once-Off Award (UCT) 2018

Data wrangling & manipulation in R (Organiser, lead) 2019
(For Dept. Biological Sciences, UCT)

Dorothy Cameron Scholarship (UCT) 2018

Teaching Biodiversity for High School 2019
Life Science Teachers (SDU¹ short course)

Masters Research Scholarship (UCT) 2018

Scientific study design & data analysis in R 2018, 2019
(SEEC²-ACCESS³ short course)

Innovation Honours Scholarship (NRF) 2017

Honours Scholarship (SAAB) 2017

Science Faculty Scholarship (UCT) 2015, 2016

Teaching assistance

Undergraduate

Angiosperm diversity 2018, 2019, 2022

Principles of ecology & evolution 2019, 2020

Scientific study design & data analysis in R 2017–2020

Introductory statistics in R 2016–2018

Conferences, talks & press

SAAB Postgraduate Virtual Symposium (Presenter) 2022

MEDECOS XVII (NRF sponsored virtual attendance) 2022

IBS⁴ Early Career Biogeographers Conf. (Presenter) 2021

iDiv⁵ Joint Recruitment Symposium (Candidate) 2020

SAAB⁶-AMA⁷-SASSB⁸ IVXV Joint Congress 2019

Best Systematics MSc Presentation (tied)

(UCT Travel Grant for attendance)

The John Mayhtam Show, CapeTalk (Interview) 2018

Harvesting Storm Water

Pint of Science Cape Town (Presenter) 2018

References

All Dept. Biological Sciences, UCT

Prof G. Anthony Verboom tony.verboom@uct.ac.za

Prof Michael D. Cramer michael.cramer@uct.ac.za

Prof A. Muthama Muasya muthama.muasya@uct.ac.za

Professional affiliations

Funding & awards

SASSB council student representative 2019–2021

SASSB student member 2018–

Innovation Masters Scholarship (NRF) 2019 SAAB student member 2017–

¹Schools Development Unit, UCT

²Centre for Statistics in Ecology, the Environment & Conservation, UCT

³Applied Centre for Climate & Earth Systems, NRF

⁴International Biogeography Society

⁵German Centre for Integrative Biodiversity Research, Halle-Jena-Leipzig

⁶South African Association of Botanists

⁷African Mycological Association

⁸Southern African Society for Systematic Biology

Research assistance

<i>Schoenus</i> (Cyperaceae) field assistance, collections & hydroponics for Dr T.L. Elliott & Prof A.M. Muasya (UCT)	2018
<i>Mimetes</i> & <i>Leucospermum</i> (Proteaceae) population monitoring for Dr J.A. Slingsby (UCT, SAEON)	2017
Legume symbiotic rhizobia collections & culturing for Dr M. Dlodlu (University of Swaziland)	2015