

## MSc candidate in Biological Sciences (UCT)

Genome-size effects on plant hydraulic ecophysiology, habitat & 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.* Supervisors: Prof M.D. Cramer & Prof G.A. Verboom

2017

**BSc** in Ecology & Evolution, Applied Biology (UCT) *With distinction in both majors & the degree*

2016

## Publications

- Van Mazijk**, Cramer, & Verboom. Environmental heterogeneity explains contrasting plant species richness between the South African Cape & southwestern Australia. *J. Biogeogr.* 48:1875–1888. DOI: 10.1111/jbi.14118. 2021
- Elliott, **van Mazijk**, Barrett, Bruhl, Joly, Muthaphuli, Wilson, & Muasya. Global dispersal & diversification of the genus *Schoenus* (Cyperaceae) from the Western Australian biodiversity hotspot. *J. Syst. & Evol.* 59(4):791–808. DOI: 10.1111/jse.12742 2021
- 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. *Divers. & Distrib.* 25(11):1736–1750. DOI: 10.1111/ddi.12973. 2019
- Van Mazijk**, Smyth, Weideman & West. Isotopic tracing of stormwater in the urban Liesbeek River. *Water SA* 44(4):674–679. DOI: 10.4314/wsa.v44i4.16. 2018

## Misc.

**Skills** Strong speaker, design, data visualisation  
**Languages** English, Afrikaans, R, bash  
**Tools** R Markdown, L<sup>A</sup>T<sub>E</sub>X, git, GitHub, MS Office  
**Methods** Statistical modelling, data manipulation, GIS (in R), functional programming  
**Press** *Harvesting Storm Water* (Interview on *The John Mayhtam Show*, CapeTalk, 2018)

Prof Michael D. Cramer michael.cramer@uct.ac.za  
 Prof A. Muthama Muasya muthama.muasya@uct.ac.za

## Funding & awards

Innovation Masters Scholarship (NRF) 2019  
 MSc Student Bursary (SAAB, inaugural recipient) 2018, 2019  
 Once-Off Award (UCT) 2018  
 Dorothy Cameron Scholarship (UCT) 2018  
 Masters Research Scholarship (UCT) 2018  
 Innovation Honours Scholarship (NRF) 2017  
 Honours Scholarship (SAAB) 2017  
 Science Faculty Scholarship (UCT) 2015, 2016

## Workshop instruction

Postgraduate

Data wrangling & manipulation in R (Organiser, lead) 2019  
 (For Dept. Biological Sciences, UCT)  
 Teaching Biodiversity for High School 2019  
 Life Science Teachers (SDU<sup>1</sup> short course)  
 Scientific study design & data analysis in R  
 (SEEC<sup>2</sup>-ACCESS<sup>3</sup> short course) 2018, 2019

## Conferences & talks

SAAB Postgraduate Virtual Symposium (Presenter) 2022  
 MEDECOS XVII (NRF sponsored virtual attendance) 2022  
 IBS<sup>4</sup> Early Career Biogeographers Conf. (Presenter) 2021  
 iDiv<sup>5</sup> Joint Recruitment Symposium (Candidate) 2020  
 SAAB<sup>6</sup>-AMA<sup>7</sup>-SASSB<sup>8</sup> IXV Joint Congress 2019  
 Best Systematics MSc Presentation (tied)  
 (UCT Travel Grant for attendance)  
 Pint of Science Cape Town (Presenter) 2018

## 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

## Professional affiliations

## References

All Dept. Biological Sciences, UCT

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

SASSB council student representative 2019–2021  
 SASSB student member 2018–  
 SAAB student member 2017–

<sup>1</sup>Schools Development Unit, UCT

<sup>2</sup>Centre for Statistics in Ecology, the Environment & Conservation, UCT

<sup>3</sup>Applied Centre for Climate & Earth Systems, NRF

<sup>4</sup>International Biogeography Society

<sup>5</sup>German Centre for Integrative Biodiversity Research, Halle-Jena-Leipzig

<sup>6</sup>South African Association of Botanists

<sup>7</sup>African Mycological Association

<sup>8</sup>Southern 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