

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^AT_EX, git, GitHub, MS Office
Methods Statistical modelling, data manipulation, GIS (in R), functional programming

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 (SDU¹ short course)
 Scientific study design & data analysis in R
 (SEEC²-ACCESS³ short course) 2018, 2019

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

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

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

Conferences & talks

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 IXV Joint Congress 2019
 Best Systematics MSc Presentation (tied)
 (UCT Travel Grant for attendance)
 Pint of Science Cape Town (Presenter) 2018

Professional affiliations

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