

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.*

Relating vascular plant species richness & environmental heterogeneity spatially in the GCFR & SWAFR

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

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

Publications

Van Mazijk, Cramer, & Verboom. 2021. Environmental heterogeneity explains contrasting plant species richness between the South African Cape and southwestern Australia. *J. Biogeogr.* 48:1875–1888. DOI: 10.1111/jbi.14118.

Elliott, **van Mazijk**, Barrett, Bruhl, Joly, Muthaphuli, Wilson, & Muasya. 2021. Global dispersal and diversification of the genus *Schoenus* (Cyperaceae) from the Western Australian biodiversity hotspot. *J. Syst. & Evol.* 59(4):791–808. DOI: 10.1111/jse.12742

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

Cramer, Wootton, **van Mazijk** & Verboom. 2019. 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.

Van Mazijk, Smyth, Weideman & West. 2018. Isotopic tracing of stormwater in the urban Liesbeek River. *Water SA* 44(4):674–679. DOI: 10.4314/wsa.v44i4.16.

Funding, awards & conferences

Student sponsorship to attend MEDECOS (NRF ¹)	2022
Presented at IBS ² ECBC ³	2021
Candidate at iDiv ⁴ Joint Recruitment Symposium	2020
Best Systematics MSc Presentation at SAAB ⁵ -AMA ⁶ -SASSB ⁷ (tie)	2019
Innovation Masters Schol. (NRF)	2019
MSc Student Bursary (SAAB)	2018–2019
Once-Off Award (UCT)	2018
Travel grant for SAAB-AMA-SASSB (UCT)	2018
Dorothy Cameron Schol. (UCT)	2018
Masters Research Schol. (UCT)	2018
Innovation Honours Schol. (NRF)	2017
Honours Schol. (SAAB)	2017
Science Faculty Schol. (UCT)	2015–2016

Teaching assistance *All for undergrad. unless stated*

Angiosperm diversity	2018–2019, 2022
Data wrangling & manipulation in R (Organised & lead workshop)	2019
Principles of ecology & evolution	2019–2020
Scientific study design & data analysis in R	2017–2020
Teaching Biodiversity for High School Life Science Teachers (SDU ⁸ short course)	2019
Stat. modelling in R (SEEC ⁹ -ACCESS ¹⁰ short course)	2018
Intro. statistics in R	2016–2018

Professional affiliations

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

Research assistance

<i>Schoenus</i> spp. (Cyperaceae: Schoeneae) collections & growth for Dr T.L. Elliott & Prof A.M. Muasya (UCT)	2018
<i>Mimetes</i> spp. & <i>Leucospermum</i> spp. (Proteaceae) population monitoring for Dr J.A. Slingsby (SAEON ¹¹ , SEEC)	2017
Legume symbiotic rhizobia collections & culturing for Dr M. Dlodlu (University of Swaziland)	2015

References *All from the 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
Prof Adam G. West	adam.west@uct.ac.za

Skills & misc.

Skills	Strong public speaker, visual design, teaching
Languages	English, Afrikaans, R, bash
Tools	R Markdown, LaTeX, git, GitHub, MS Office
Methods	Stat. modelling, data manipulation, GIS (in R)

¹National Research Foundation (South Africa)

²International Biogeography Society

³Early Career Biogeographers Conference

⁴German Centre for Integrative Biodiversity Research, Halle-Jena-Leipzig

⁵South African Association of Botanists

⁶African Mycological Association

⁷Southern African Society for Systematic Biology

⁸UCT Schools Development Unit

⁹UCT Centre for Statistics in Ecology, the Environment & Conservation

¹⁰NRF Applied Centre for Climate & Earth Systems

¹¹South African Environmental Observation Network