

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*

2017

2016

Publications

- Van Mazijk**, Cramer, & Verboom. 2021. Environmental heterogeneity explains contrasting plant species richness between the South African Cape & southwestern Australia. *J. Biogeogr.* 48:1875–1888. DOI: 10.1111/jbi.14118.
- Elliott, **van Mazijk**, Barrett, Bruhl, Joly, Muthaphuli, Wilson, & Muasya. 2021. 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
- 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

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| 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*

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| 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 |
| Introductory statistics in R | 2016–2018 |

Professional affiliations

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

Research assistance

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| <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)*

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| 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.

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| 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