Ruan van Mazijk Curriculum vitae

Education All at the University of Cape Town (UCT)

MSc candidate in Biological Sciences Genome-size effects on plant hydraulic ecophysiology, habitat & phenology in Cape schoenoid sedges Principal supervisor: A/Prof A.M. Muasya. Co-supervisors: A/Prof G.A. Verboom & A/Prof A.G. West	2018–
BSc Hons in Biological Sciences <i>With distinction</i> Relating vascular plant species richness & environmental heterogeneity spatially in the GCFR & SWAFR Supervisors: Prof M.D. Cramer & A/Prof G.A. Verboom	2017
BSc in Ecology & Evolution, Applied Biology With distinction in both majors & the degree	2016

Publications

- Elliott, T.L., van Mazijk, R., Barrett, R.L., Bruhl, J.J., Joly, S., Muthaphuli, N., Wilson, K.L. & Muasya, A.M. (In review). Global dispersal and diversification of the genus Schoenus (Cyperaceae) from the Western Australian biodiversity hotspot. J. Syst. & Evol.
- Van Mazijk, R., Cramer, M.D. & Verboom, G.A. (In press). Environmental heterogeneity explains contrasting plant species richness between the South African Cape and southwestern Australia. J. Biogeogr.
- Elliott, T.L., Laidler, G., Muasya, A.M., Muthaphuli, N. & van Mazijk, R. (2019). Solving the sedge mystery. Veld & Flora 105(3):20–25. (Popular article)
- Cramer, M.D., Wootton, L.M., van Mazijk, R. & Verboom, G.A. (2019). New regionally-modelled soil layers improve prediction of vegetation type relative to that based on global soil models. Divers. Distrib. 00:1-15. DOI: 10.1111/ddi.12973.
- Van Mazijk, R., Smyth, L.K., Weideman, E.A. & West, A.G. (2018). Isotopic tracing of stormwater in the urban Liesbeek River. Water SA 44(4):674-679. DOI: 10.4314/wsa.v44i4.16.

Funding & awards

Teaching assistance All for undergrad. unless stated

Best Systematics MSc Presentation at		Data wrangling & manipulation in R	
SAAB ¹ -AMA ² -SASSB ³ IVXV ⁴ (tie)	2019	(Organised & lead workshop)	2019
Innovation Masters Schol. (DST ⁵ -NRF ⁶)	2019	Principles of ecology & evolution	2019–
MSc Student Bursary (SAAB)	2018-2019	Angiosperm diversity	2018–
Once-Off Award (UCT)	2018	Scientific study design & data analysis in R	2017–
Travel grant for SAAB-AMA-SASSB IVXV (UCT)	2018	Teaching Biodiversity for High School Life	
Dorothy Cameron Schol. (UCT)	2018	2018 Science Teachers (SDU ⁷ short course)	
Masters Research Schol. (UCT)	2018	Stat. modelling in R (SEEC ⁸ -ACCESS ⁹ short course	e) 2018
Innovation Honours Schol. (DST-NRF)	2017	7 Intro. statistics in <i>R</i> 2016	
Honours Schol. (SAAB)	2017		
Science Faculty Schol. (UCT)	2015–2016	Professional affiliations	
		SASSB council member, student representative	2019–
Total ca. US\$18,800 or €16,800		SAAB student member	2017-

Research assistance

Schoenus spp. (Cyperaceae: Schoeneae) collections & growth for Dr T.L. Elliott & A/Prof A.M. Muasya (UCT)	2018
Mimetes spp. & Leucospermum spp. (Proteaceae) population monitoring for Dr J.A. Slingsby (SAEON ¹⁰ , SEEC)	2017
Legume symbiotic rhizobia collections & culturing for Dr M. Dludlu (University of Swaziland)	2015

Skills & misc. **References** All from the Dept. Biological Sciences (UCT)

A/Prof G.A. Verboom	tony.verboom@uct.ac.za	Skills	Strong public speaker, visual design, teaching
Prof M.D. Cramer	michael.cramer@uct.ac.za	Languages	English, Afrikaans, R, bash
Prof A.M. Muasya	muthama.muasya@uct.ac.za	Tools	R Markdown, LaTeX, git, GitHub, MS Offce
A/Prof A.G. West	adam.west@uct.ac.za	Methods	Stat. modelling, data manipulation, GIS (in R)

¹South African Association of Botanists

²African Mycological Association

³Southern African Society for Systematic Biology

⁴45th Annual SAAB, AMA & SASSB Joint Congress

⁵Department of Science & Technology (South Africa)

⁶National Research Foundation (South Africa)

⁷UCT Schools Development Unit

 $^{^8 \}mbox{UCT}$ Centre for Statistics in Ecology, the Environment & Conservation

⁹DST-NRF Applied Centre for Climate & Earth Systems

¹⁰South African Environmental Observation Network