Ruan van Mazijk Curriculum vitae

Education All at the University of Cape Town (UCT)

MSc candidate in Biological Sciences	2018-
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	
BSc Hons in Biological Sciences With distinction 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 review). 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	
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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		Science Teachers (SDU ⁷ short course) 2019		
Masters Research Schol. (UCT) 2018		Stat. modelling in R (SEEC ⁸ -ACCESS ⁹ short course) 2018		
Innovation Honours Schol. (DST-NRF)		Intro. statistics in R	2016–2018	
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

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

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

⁸UCT Centre for Statistics in Ecology, the Environment & Conservation

⁹DST-NRF Applied Centre for Climate & Earth Systems

¹⁰South African Environmental Observation Network