Ruan van Mazijk Curriculum vitae

MSc candidate in Biological Sciences

UCT1

Genome-size effects on plant hydraulic ecophysiology, habitat & phenology in Cape schoenoid sedges Principal supervisor: Prof A.M. Muasya. Co-supervisors: A/Prof G.A. Verboom & A/Prof A.G. West

BSc Hons in Biological Sciences With distinction

UCT 2017

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

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

BSc in Ecology & Evolution, Applied Biology With distinction in both majors & the degree

UCT 2016

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		Teaching assistance All for undergrad. unless sta	ated	
Student sponsorship to attend MEDECOS (NRF	²) 2022	Angiosperm diversity 2018-	-2019, 2022	
Presented at IBS ³ ECBC ⁴ 2021		Data wrangling & manipulation in R		
Candidate at iDiv ⁵ Joint Recruitment Symposiu	m 2020	(Organised & lead workshop)	2019	
Best Systematics MSc Presentation at		Principles of ecology & evolution	2019–2020	
SAAB ⁶ -AMA ⁷ -SASSB ⁸ (tie)	2019	Scientific study design & data analysis in R	2017–2020	
Innovation Masters Schol. (NRF)	2019	Teaching Biodiversity for High School Life		
MSc Student Bursary (SAAB)	2018–2019	Science Teachers (SDU ⁹ short course)	2019	
Once-Off Award (UCT)	2018	Stat. modelling in R (SEEC ¹⁰ -ACCESS ¹¹ short cour	rse) 2018	
Travel grant for SAAB-AMA-SASSB (UCT)	2018	Intro. statistics in R	2016–2018	
Dorothy Cameron Schol. (UCT)	2018	Professional affiliations		
Masters Research Schol. (UCT)	2018	SASSB council member, student representative	2019–	
Innovation Honours Schol. (NRF)	2017	SASSB student member	2018–	
Honours Schol. (SAAB)	2017	SAAB student member	2017–	
Science Faculty Schol. (UCT)	2015–2016		2017	

Research assistance

Schoenus spp. (Cyperaceae: Schoeneae) collections & growth for Dr T.L. Elliott & Prof A.M. Muasya (UCT)	2018
Mimetes spp. & Leucospermum spp. (Proteaceae) population monitoring for Dr J.A. Slingsby (SAEON ¹² , SEEC)	2017
Legume symbiotic rhizobia collections & culturing for Dr M. Dludlu (University of Swaziland)	2015

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

¹University of Cape Town

²National Research Foundation (South Africa)

³International Biogeography Society

⁴Early Career Biogeographers Conference

⁵German Centre for Integrative Biodiversity Research, Halle-Jena-Leipzig

⁶South African Association of Botanists

⁷African Mycological Association

⁸Southern African Society for Systematic Biology

⁹UCT Schools Development Unit

 $^{^{10}\}mathrm{UCT}$ Centre for Statistics in Ecology, the Environment & Conservation . .

¹¹NRF Applied Centre for Climate & Earth Systems

¹²South African Environmental Observation Network