

# Ruan van Mazijk

Curriculum vitae



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## MSc candidate in Biological Sciences (UCT)

Does genome size affect plant water use & phenology? Comparing ecophysiological function across

Cape schoenoid sedges (tribe Schoeneae, Cyperaceae)

Principal supervisor: Prof A.M. Muasya

Co-supervisors: Prof G.A. Verboom & Prof A.G. West

## BSc Hons in Biological Sciences (UCT) 2017

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

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

With distinction

## BSc in Ecology & Evolution, Applied Biology (UCT) 2016

With distinction in both majors & the degree

## Skills

Strong speaker, design, data visualisation

English, Afrikaans, R, bash

## Languages

R Markdown, L<sup>A</sup>T<sub>E</sub>X, git, GitHub, MS Office

## Tools

Statistical modelling, data manipulation, GIS (in R), functional programming

## Methods

## Publications

<b>Van Mazijk</b> , Cramer, & Verboom. Environmental heterogeneity explains contrasting plant species richness between the South African Cape & southwestern Australia. <i>Journal of Biogeography</i> 48:1875–1888.	2021
DOI: 10.1111/jbi.14118.	
Elliott, <b>van Mazijk</b> , Barrett, Bruhl, Joly, Muthaphuli, Wilson, & Muasya. Global dispersal & diversification of the genus <i>Schoenus</i> (Cyperaceae) from the Western Australian biodiversity hotspot. <i>Journal of Systematics &amp; Evolution</i> 59(4):791–808. DOI: 10.1111/jse.12742.	2021
Elliott, Laidler, Muasya, Muthaphuli & <b>van Mazijk</b> . Solving the sedge mystery. <i>Veld &amp; Flora</i> 105(3):20–25.	2019
Cramer, Wootton, <b>van Mazijk</b> & Verboom. New regionally-modelled soil layers improve prediction of vegetation type relative to that based on global soil models. <i>Diversity &amp; Distributions</i> 25(11):1736–1750.	2019
DOI: 10.1111/ddi.12973.	
<b>Van Mazijk</b> , Smyth, Weideman & West. Isotopic tracing of stormwater in the urban Liesbeek River. <i>Water SA</i> 44(4):674–679. DOI: 10.4314/wsa.v44i4.16.	2018

## Professional memberships

South Afr. Association of Botanists	2017–	Principles of ecology & evolution	2019, 2020
Southern Afr. Society for Systematic Biology → Council student representative	2018– 2019–2021	Scientific study design & data analysis in R Introductory statistics in R	2017–2020 2016–2018

## Workshop instruction

Data wrangling & manipulation in R (Organiser, lead, for Dept. Biological Sciences, UCT)	Postgraduate 2019
Teaching Biodiversity for High School	2019
Life Science Teachers (Speaker, for SDU <sup>1</sup> )	
Scientific study design & data analysis in R (Tutor, for SEEC <sup>2</sup> -ACCESS <sup>3</sup> )	2018, 2019

## References

Prof A. Muthama Muasya	All Dept. Biological Sciences, UCT muthama.muasya@uct.ac.za
Prof G. Anthony Verboom	tony.verboom@uct.ac.za
Prof Michael D. Cramer	michael.cramer@uct.ac.za

## Teaching assistance

Angiosperm diversity	Undergraduate 2018, 2019, 2022
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<sup>1</sup>SDU: Schools Development Unit, UCT

<sup>2</sup>SEEC: Centre for Statistics in Ecology, the Environment & Conservation, UCT

<sup>3</sup>ACCESS: Applied Centre for Climate & Earth Systems, NRF

## Funding & awards

NRF Innovation Masters Scholarship	2019	MEDECOS XVII (NRF sponsored virtual attendance)	2022
SAAB MSc Student Bursary (inaugural recipient)	2018, 2019	IBS <sup>4</sup> Early Career Biogeographers Conference	2021
UCT Once-Off Award	2018	iDiv <sup>5</sup> Joint Recruitment Symposium	2020
UCT Dorothy Cameron Scholarship	2018	SAAB-AMA-SASSB IVXV Joint Congress	2019
UCT Masters Research Scholarship	2018	Best Systematics MSc Presentation (tied) (UCT Travel Grant for attendance)	
NRF Innovation Honours Scholarship	2017	satRday Cape Town (Attended)	2018
SAAB Honours Scholarship	2017	The John Maytham Show, CapeTalk (Interview)	2018
UCT Science Faculty Scholarship	2015, 2016	Harvesting Storm Water	
<b>Conferences, talks &amp; press</b>		Pint of Science Cape Town	2018
SAAB Postgraduate Virtual Symposium	2022	Biodiversity & Environmental Change in the CFR <sup>6</sup>	2017

## Research assistance

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

<sup>4</sup>IBS: International Biogeography Society

<sup>5</sup>iDiv: German Centre for Integrative Biodiversity Research, Halle-Jena-Leipzig

<sup>6</sup>CFR: Cape Floristic Region