## Ruan van Mazijk Curriculum vitae

MSc candidate in Biological Sciences (UCT<sup>1</sup>)

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 (UCT) With distinction.

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 (UCT) With distinction in both majors & the degree

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		<b>Teaching assistance</b> All for undergrad. unless sta	ated
Student sponsorship to attend MEDECOS (NRF	<sup>-2</sup> ) 2022	Angiosperm diversity 2018-	-2019, 2022
Presented at IBS <sup>3</sup> ECBC <sup>4</sup>	2021	Data wrangling & manipulation in R	
Candidate at iDiv <sup>5</sup> Joint Recruitment Symposiu	m 2020	(Organised & lead workshop)	2019
Best Systematics MSc Presentation at		Principles of ecology & evolution	2019–2020
SAAB <sup>6</sup> -AMA <sup>7</sup> -SASSB <sup>8</sup> (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 <sup>9</sup> short course)	2019
Once-Off Award (UCT)	2018	Stat. modelling in R (SEEC <sup>10</sup> -ACCESS <sup>11</sup> 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 <sup>12</sup> , SEEC)		
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)

<sup>&</sup>lt;sup>1</sup>University of Cape Town

<sup>&</sup>lt;sup>2</sup>National Research Foundation (South Africa)

<sup>&</sup>lt;sup>3</sup>International Biogeography Society

<sup>&</sup>lt;sup>4</sup>Early Career Biogeographers Conference

<sup>&</sup>lt;sup>5</sup>German Centre for Integrative Biodiversity Research, Halle-Jena-Leipzig

<sup>&</sup>lt;sup>6</sup>South African Association of Botanists

<sup>&</sup>lt;sup>7</sup>African Mycological Association

<sup>&</sup>lt;sup>8</sup>Southern African Society for Systematic Biology

<sup>&</sup>lt;sup>9</sup>UCT Schools Development Unit

 $<sup>^{10}\</sup>mathrm{UCT}$  Centre for Statistics in Ecology, the Environment & Conservation

<sup>&</sup>lt;sup>11</sup>NRF Applied Centre for Climate & Earth Systems

<sup>&</sup>lt;sup>12</sup>South African Environmental Observation Network