# Ruan van Mazijk Curriculum vitae

# MSc candidate in Biological Sciences (UCT)

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

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

2016

### **Publications**

**Van Mazijk**, Cramer, & Verboom. Environmental heterogeneity explains contrasting plant species richness between the South African Cape & southwestern Australia. *J. Biogeogr.* 48:1875–1888. DOI: 10.1111/jbi.14118. 202

Elliott, **van Mazijk**, Barrett, Bruhl, Joly, Muthaphuli, Wilson, & Muasya. Global dispersal & 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**. Solving the sedge mystery. *Veld & Flora* 105(3):20–25. (Popular article)

Cramer, Wootton, van Mazijk & Verboom. 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. 2019

**Van Mazijk**, Smyth, Weideman & West. Isotopic tracing of stormwater in the urban Liesbeek River. *Water SA* 44(4):674–679. DOI: 10.4314/wsa.v44i4.16.

2018

Funding, awards & conferences		<b>Teaching assistance</b> All for undergrad. unless st	tated
Student sponsorship to attend MEDECOS (NRF	<sup>1</sup> ) 2022	Angiosperm diversity 2018	3–2019, 2022
Presented at IBS <sup>2</sup> ECBC <sup>3</sup>	2021	Data wrangling & manipulation in R	
Candidate at iDiv <sup>4</sup> Joint Recruitment Symposium	m 2020	(Organised & lead workshop)	2019
Best Systematics MSc Presentation at		Principles of ecology & evolution	2019–2020
SAAB <sup>5</sup> -AMA <sup>6</sup> -SASSB <sup>7</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>8</sup> short course)	2019
Once-Off Award (UCT)	2018	Stat. modelling in R (SEEC9-ACCESS10 short cour	rse) 2018
Travel grant for SAAB-AMA-SASSB (UCT)	2018	Introductory statistics in R	2016–2018
Dorothy Cameron Schol. (UCT)	2018	Professional affiliations	
Masters Research Schol. (UCT)	2018	SASSB council member, student representative	e 2019–
Innovation Honours Schol. (NRF)	2017	SASSB student member	2018–
Honours Schol. (SAAB)	2017	SAAB student member	2017–
Science Faculty Schol. (UCT)	2015-2016		20

#### 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>11</sup> , SEEC)	2017
Legume symbiotic rhizobia collections & culturing for Dr M. Dludlu (University of Swaziland)	2015

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

tony.verboom@uct.ac.za michael.cramer@uct.ac.za muthama.muasya@uct.ac.za adam.west@uct.ac.za

# Skills & misc.

Skills	Strong public speaker, visual design, teaching
Languages	English, Afrikaans, R, bash
Tools	R Markdown, LaTeX, git, GitHub, MS Offce
Methods	Stat. modelling, data manipulation, GIS (in R)

Prof G. Anthony Verboom

Prof Michael D. Cramer

Prof A. Muthama Muasya

Prof Adam G. West

<sup>&</sup>lt;sup>1</sup>National Research Foundation (South Africa)

<sup>&</sup>lt;sup>2</sup>International Biogeography Society

<sup>&</sup>lt;sup>3</sup>Early Career Biogeographers Conference

<sup>&</sup>lt;sup>4</sup>German Centre for Integrative Biodiversity Research, Halle-Jena-Leipzig

<sup>&</sup>lt;sup>5</sup>South African Association of Botanists

<sup>&</sup>lt;sup>6</sup>African Mycological Association

<sup>&</sup>lt;sup>7</sup>Southern African Society for Systematic Biology

<sup>&</sup>lt;sup>8</sup>UCT Schools Development Unit

<sup>&</sup>lt;sup>9</sup>UCT Centre for Statistics in Ecology, the Environment & Conservation

<sup>&</sup>lt;sup>10</sup>NRF Applied Centre for Climate & Earth Systems

<sup>&</sup>lt;sup>11</sup>South African Environmental Observation Network