# Ruan van Mazijk Curriculum vitae

## **Education** All at the University of Cape Town (UCT)

### 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: 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, R.**, Cramer, M.D. & Verboom, G.A. (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, T.L., van Mazijk, R., Barrett, R.L., Bruhl, J.J., Joly, S., Muthaphuli, N., Wilson, K.L. & Muasya, A.M. (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, 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.* 25(11):1736–1750. 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 & conferences		<b>Teaching assistance</b> All for undergrad. unless stated	
Student Sponsorship to attend MEDECOS XVII		Angiosperm diversity 2018-	-2019, 2022
(DST <sup>1</sup> -NRF <sup>2</sup> )	2022	Data wrangling & manipulation in R	
Presented at IBS <sup>3</sup> ECBC <sup>4</sup>	2021	(Organised & lead workshop)	2019
Candidate at iDiv <sup>5</sup> Joint Recruitment Symposiu	ım 2020	Principles of ecology & evolution	2019–2020
Best Systematics MSc Presentation at		Scientific study design & data analysis in R	2017–2020
SAAB <sup>6</sup> -AMA <sup>7</sup> -SASSB <sup>8</sup> IVXV <sup>9</sup> (tie)	2019	Teaching Biodiversity for High School Life	
Innovation Masters Schol. (DST-NRF)	2019	Science Teachers (SDU <sup>10</sup> short course)	2019
MSc Student Bursary (SAAB)	2018–2019	Stat. modelling in R (SEEC <sup>11</sup> -ACCESS <sup>12</sup> short cour	se) 2018
Once-Off Award (UCT)	2018	Intro. statistics in R	2016–2018
Travel grant for SAAB-AMA-SASSB IVXV (UCT)	2018	Professional affiliations	
Dorothy Cameron Schol. (UCT)	2018	SASSB council member, student representative	2019–
Masters Research Schol. (UCT)	2018	SASSB student member	2018–
Innovation Honours Schol. (DST-NRF)	2017	SAAB student member	2017–
Honours Schol. (SAAB)	2017		_0.7
Science Faculty Schol. (UCT)	2015–2016		

Total ca. US\$18,800 or €16,800

#### Research assistance

Schoenus spp. (Cyperaceae: Schoeneae) collections & growth for Dr T.L. Elliott & Prof A.M. Muasya (UCT)

Mimetes spp. & Leucospermum spp. (Proteaceae) population monitoring for Dr J.A. Slingsby (SAEON<sup>13</sup>, SEEC)

Legume symbiotic rhizobia collections & culturing for Dr M. Dludlu (University of Swaziland)

2018

2019

2019

<sup>&</sup>lt;sup>1</sup>Department of Science & Technology (South Africa)

<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>45<sup>th</sup> Annual SAAB, AMA & SASSB Joint Congress

<sup>&</sup>lt;sup>10</sup>UCT Schools Development Unit

<sup>&</sup>lt;sup>11</sup>UCT Centre for Statistics in Ecology, the Environment & Conservation

<sup>&</sup>lt;sup>12</sup>DST-NRF Applied Centre for Climate & Earth Systems

<sup>&</sup>lt;sup>13</sup>South African Environmental Observation Network

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

A/Prof G.A. Verboom Prof M.D. Cramer Prof A.M. Muasya A/Prof A.G. West tony.verboom@uct.ac.za michael.cramer@uct.ac.za muthama.muasya@uct.ac.za adam.west@uct.ac.za Skills & misc.

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