# Ruan van Mazijk Curriculum vitae

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

MSc candidate in Biological Sciences	2018-
Genome-size effects on plant hydraulic ecophysiology, habitat & phenology in Cape schoenoid sedges Principal supervisor: A/Prof A.M. Muasya. Co-supervisors: A/Prof G.A. Verboom & A/Prof A.G. West	
<b>BSc Hons</b> in Biological Sciences <i>With distinction</i> Relating vascular plant species richness & environmental heterogeneity spatially in the GCFR & SWAFR Supervisors: Prof M.D. Cramer & A/Prof G.A. Verboom	2017
BSc in Ecology & Evolution, Applied Biology With distinction in both majors & the degree	2016

#### **Publications**

- Van Mazijk, R., Cramer, M.D. & Verboom, G.A. (In prep.). The role of environmental heterogeneity in determining plant species richness in the GCFR & SWAFR. J. Biogeogr.
- 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. 00:1-15. 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

#### Best Systematics MSc Presentation at SAAB<sup>1</sup>-AMA<sup>2</sup>-SASSB<sup>3</sup> IVXV<sup>4</sup> (tie) 2019 Innovation Masters Schol. (DST<sup>5</sup>-NRF<sup>6</sup>) 2019 MSc Student Bursary (SAAB) 2018-2019 Once-Off Award (UCT) 2018 Travel grant for SAAB-AMA-SASSB IVXV (UCT) 2018 Dorothy Cameron Schol. (UCT) 2018 Masters Research Schol. (UCT) 2018 Innovation Honours Schol. (DST-NRF) 2017 Honours Schol. (SAAB) 2017 Science Faculty Schol. (UCT) 2015-2016

Total ca. US\$18,800 or €16,800

#### **Teaching assistance** All for undergrad. unless stated

	Data wrangling & manipulation in R	
9	(Organised & lead workshop)	2019
9	Principles of ecology & evolution	2019–
9	Angiosperm diversity	2018–
8	Scientific study design & data analysis in R	2017–
8	Teaching Biodiversity for High School Life	
8	Science Teachers (SDU <sup>7</sup> short course)	2019
8	Stat. modelling in R (SEEC8-ACCESS9 short course	e) 2018
7	Intro. statistics in R	2016–2018
7		

### **Professional affiliations**

SASSB council member, student representative	2019-
SAAB student member	2017-

## Research assistance

Schoenus spp. (Cyperaceae: Schoeneae) collections & growth for Dr T.L. Elliott & A/Prof A.M. Muasya (UCT)	2018
Mimetes spp. & Leucospermum spp. (Proteaceae) population monitoring for Dr J.A. Slingsby (SAEON <sup>10</sup> , SEEC)	2017
Legume symbiotic rhizobia collections & culturing for Dr M. Dludlu (University of Swaziland)	2015

Skills

Tools

Methods

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

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

#### Skills & misc.

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

<sup>&</sup>lt;sup>1</sup>South African Association of Botanists

<sup>&</sup>lt;sup>2</sup> African Mycological Association

<sup>&</sup>lt;sup>3</sup>Southern African Society for Systematic Biology

<sup>445&</sup>lt;sup>th</sup> Annual SAAB, AMA & SASSB Joint Congress

<sup>&</sup>lt;sup>5</sup>Department of Science & Technology (South Africa)

<sup>&</sup>lt;sup>6</sup>National Research Foundation (South Africa)

<sup>&</sup>lt;sup>7</sup>UCT Schools Development Unit

 $<sup>^8 \</sup>text{UCT}$  Centre for Statistics in Ecology, the Environment & Conservation

<sup>&</sup>lt;sup>9</sup> DST-NRF Applied Centre for Climate & Earth Systems

<sup>&</sup>lt;sup>10</sup>South African Environmental Observation Network