DANIELA AROS MUALIN

darosm@systbot.uzh.ch / dfaros@uc.cl
Alstetterstrasse 220, 8048, Zürich, Switzerland
(+41) 76 610 98 70

EDUCATION

2020 - Present

PhD Ecology (Candidate)
University of Zurich, Switzerland

2015 - 2017

MSc Plant Science
University of Bonn, Germany

2011 - 2014

BSc Biology
Pontificia Universidad Católica de Chile
Graduated with two votes of distinction

2008 - 2010

Engineering Student
Universidad de Chile
Voluntary retirement due to career change

RESEARCH

University of Zurich

2017

PhD. Thesis

Project “Carbon- and water-balance among ferns.”; PhD. Michael Kessler.
Institute of Sistematic and Evolution in Botany.

University of Bonn

2017

MSc. Thesis

Project “Functional diversity in ferns is driven by species richness rather than environmental constrains.”; PhD. Michael Kessler.
Institute of Sistematic and Evolution in Botany.

Pontificia Universidad Católica de Chile

2014

BSc. Thesis

Project “Ecophysiology of *Echinopsis chiloensis* and its relationship with the holoparasite *Tristerix aphyllus*.”; PhD. Carmen Gloria Ossa.
Faculty of Biological Sciences.

2013

Research Seminar

Project “Evolutionary ecophysiology on the genus *Myrceugenia*.”; Prof. PhD. Fernanda Perez.
Faculty of Biological Sciences.

2012

Bibliographic Research

How fossil rodent middens help the understanding of paleoclimate and vegetation history; Prof. PhD. Claudio Latorre.
Faculty of Biological Sciences.

PUBLICATIONS

Aros-Mualin, D.*, Flexas J., Galbier F., Kessler M. (2022). Exploring the ecological relevance and variability of circadian regulation and phototropism in Marsileaceae. *Manuscript submitted for publication.*

Aros-Mualin, D.*, Guadagno C. R., Silvestro D., Kessler M. (2022). Widespread absence of circadian regulation in gas exchange among ferns and lycophytes under free-running conditions. *Manuscript submitted for publication.*

Ossa, C. G.*, **Aros-Mualin, D.***, Mujica M. I., & Pérez, F. (2021). The physiological effect of a holoparasite over a cactus along an environmental gradient. *Frontiers in plant science, 12,* 763446. DOI: 10.3389/fpls.2021.763446

Aros-Mualin, D.*, Noben S., Karger D.N., Carvajal-Hernandez C. I., Salazar L., Kluge J., Lehnert M., Quandt M., Kessler M. (2021). Functional diversity in ferns is driven by species richness rather than by environmental constrains. *Frontiers in plant science, 11.* DOI: 10.3389/fpls.2020.615723

Weigand A.*, Abrahamczyk, S., Aubin, I., Bita-Nicolae, C., Bruelheide, H., I. Carvajal-Hernández, C., ... **Aros-Mualin, D.**, ..., & Kessler, M. (2020). Global fern and lycophyte richness explained: How regional and local factors shape plot richness. *Journal of Biogeography, 47*(1), 59-71. DOI: 10.111/jbi.13782

CONFERENCE PRESENTATIONS

XV Summer Colloquium on Plant Ecophysiology, Chile (2020)

Aros-Mualin, D., Kessler M. "Evolution of carbon- and water-relations among lycophytes and ferns."
Oral presentation

Annual Meeting of the Ecological Society of Germany, Austria and Switzerland (GfÖ), Austria (2018)

Aros-Mualin, D., Noben S., Karger D.N., Carvajal-Hernandez C. I., Salazar L., Kluge J., Lehnert M., Quandt M., Kessler M. "Functional diversity in ferns is driven by species richness rather than by environmental constrains."
Oral presentation

XI Congreso Latinoamericano de Botánica, Brasil (2014)

Aros-Mualin, D., Ossa, C. G., Perez, F. "El holoparasito Tristerix aphyllus ¿Afecta la adecuación biológica o fisiológica de su principal hospedero *Echinopsis chiloensis*."
Poster Presentation

V Binational Ecology Congress of Chile and Argentina, Chile (2013)

Aros, D., Ossa, C. G., Campano, F., Bull-Hereñu, K., Hinojosa, F., Perez, F. "Xylem functional traits in *Myrceugenia* contradicts evolutionary theory of habitat adaptation."
Poster Presentation

WORK EXPERIENCE

Pontificia Universidad Católica de Chile
2018 **Lab Technician**

DNA extraction and microsatellite amplification for the project “Ecological and evolutionary consequences of nototribic pollination mechanism in the oil-rewarding *Calceolaria* species”
PhD Maureen Murúa
FONDECYT 11170377

University of Zurich
2018 **Field Work**

Characterization of ferns in the south of Chile for the project “Understanding global patterns of fern diversity and diversification”
PhD Michael Kessler
SNF 31003A 169199

Botanical Garden of Bonn
2016 - 2017 **Turistic Guide**

Guide of the palace and plant species history around the botanical garden.

University of Bonn
2016 **Web Designer**

Design, organization and content of the MSc. Plant Science webpage.

Pontificia Universidad Católica de Chile
2015 **Lab Manager**

“Comparative Phylogeography of woody plant species from Mediterranean and temperate forest of Southern South America: testing the influence of plant functional strategies on the response of species to past climatic changes”
PhD. Fernanda Pérez
FONDECYT project n° 1141047

2014 **Lab Technician**

TEACHING ASSISTANT

Biodiversity and Biogeography **2020**
PhD. Michael Kessler
University of Zurich

Plant Biology and Diversity **2014 - 2013**
Prof. PhD. J. Correa and Prof. PhD F. Pérez
Pontificia Universidad Católica de Chile

Ecology **2014**
Prof. PhD. P. Marquet
Pontificia Universidad Católica de Chile

Plant Physiology **2014**
PhD. M. Carmona and Prof. PhD. F. Pérez
Pontificia Universidad Católica de Chile

ADDITIONAL INFORMATION

Languages

English ●●●●○
Spanish ●●●●●

Computer Skills

R
Python
QDD
Galaxy
Illustrator
InDesign
Photoshop

OTHER INTERESTS

Diving

Rescue Diver (PADI)
Emergency First Response provider (EFR)

Illustration

Portfolio: www.behance.net/DaniArosMualin

Zurich, 2022