
CURRICULUM VITAE



Dr. Valentina Sechi

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WORKING EXPERIENCE

2018 - Currently **Scientific Project Manager |Theme Coordinator** (0,4 FTE)

Wetsus Water Technology Center, Leeuwarden, NL

Main activities: Soil Theme Coordinator, research strategy, PhD students supervision, maintain engagement and involvement of private partners (Wetsus soil theme members)

2022 - Currently **Programme Director** (0,4 FTE)

MSc Water Technology, Leeuwarden, NL

Main Tasks: Responsible for organization, integration and quality of education. Ensure the educational quality of teaching and teachers, Maintains external relationships on behalf of the programme

2019 - 2022 **Associate professor** - Resilient Soils (0,4 FTE)

University of applied Science Van Hall Larenstein, Leeuwarden, NL

Main activities: Scientific project manager EU Interreg NWE project (Cconnects) on sustainable peatland management (20 partners)

Coordinate research activities in a large EU consortium: create synergies, maintain overview of the progress and make sure the consortium meet the project commitment and requirements

Guest lectures on Soil Ecology and Biodiversity for bachelor students

2012 - 2017 **PhD research project** (0.8 FTE)

Thesis on Biotic interactions and trait-based ecosystem functioning in soil.

Department of Soil Quality, Wageningen University in collaboration with the Dutch National Institute for Public Health and the Environment (RIVM) - NL

Project aims: Assessing the effect of anthropogenic pressure on soil biodiversity and functions with special focus on the responses of soil organisms to land management practices, as part of a RIVM project on the Assessment of Soil Ecosystem Services.

2011 - 2012

Guest researcher working on the identification of trophic relations of soil mesofauna in agricultural grass fields

Departments of Bioscience and Agroecology, Aarhus University - DK

Main activities: Test the effect of different crops composition on Collembola community in managed grasslands

2010 - 2011

Research assistant working on ecotoxicology of soil fauna,

Department of Soil Ecology, National Environmental Research Institute (NERI) University of Aarhus -Denmark

Main activities: Experimental setting and design;

Test the effect of common pesticides on soil community;

Test and give suggestions for improving the Organisation for Economic Co-operation and Development (OECD) protocols on pesticides in Europe

EDUCATION

2009-2010

Master of specialization in "Environmental evaluation and Planning"

Polytechnic University of Turin - Italy

Thesis: Analysis of the existing methodologies for the assessment of anthropogenic pressure on biodiversity

Main subjects: Life Cycle Assessment, Sustainability, Environmental Assessment and Environmental law

2006-2009

Master degree in Ecology and Evolution

University of Rome Tor Vergata - Italy

Thesis: Ecological restoration of the Peruvian wood "loma" of Atiquipa: morphometric and growth comparative analysis of *Caesalpinia spinosa* in natural and restored population

Main subjects: Basic and applied ecology, Ecology and evolution, Environmental sustainability, Environmental economy and Land restoration

2007-2008

Erasmus exchange programme

Complutense University of Madrid- Spain

*Thesis on restoration of *Caesalpinia spinosa* in the Peruvian wood "loma"*

Main subjects: Ecological restoration, Ecology

2002-2006

Bachelor degree in Ecology and evolution

University of Roma Tor Vergata - Italy

Thesis: Study of the relationship between abiotic factors and composition of fish populations through multivariate analysis

Main subjects: Basic and applied ecology, Ecology and evolution, Freshwater ecology, Environmental sustainability, Biology

LANGUAGES

Italian: native speaker

English: Proficient use (European level scale: C1)

Dutch: independent use (European level scale: B1/B2)

Spanish: Independent/Proficient user (European level scale: B2/C1)

LIST OF PUBLICATIONS

Luo, Y., Chavez-Rico, V.S., **Sechi, V.**, Bezemer, T.M., Buisman J.N.C., Ter Heijne, A., (2023) . Effect of organic amendments obtained from different pretreatment technologies on soil microbial community. *Environmental Research* 232: 116346.

Chavez-Rico, V.S., Van den Bergh, S., Bodelier, L.E. P., van Eekert, M., Yujia Luo, Nierop, G.J.K., **Sechi, V.**, Veeken, A., Buisman J.N.C., (2023). Effect of pre-treatment processes of organic residues on soil aggregates. *Environmental Technology & Innovation*, 30: 2352-1864

Luo, Y., Lopez, J.B.G., van Veelen, H.P.J., **Sechi, V.**, ter Heijne, A., Bezemer, T.M., Buisman J.N.C., (2022). Bacterial and fungal co-occurrence patterns in agricultural soils amended with compost and bokashi. *Soil Biology and Biochemistry* 174:

Chavez-Rico, V.S., Bodelier, P.L.E., van Eekert, M., **Sechi, V.**, Veeken, A., Buisman J.N.C., (2022). Producing organic amendments: Physicochemical changes in biowaste used in anaerobic digestion, composting, and fermentation. *Waste Management* 149: 177-185

Luo, Y., van Veelen, H.P.J., Chen, S., **Sechi, V.**, ter Heijne, A., Veeken, A., Buisman J.N.C., Bezemer, T.M., (2022). Effects of sterilization and maturity of compost on soil bacterial and fungal communities and wheat growth, *Geoderma* 409: 115598

Sechi, V., De Goede, R.G.M., Rutgers, M., Brussaard, L. & Mulder, C. (2018). Functional diversity in nematode communities across terrestrial ecosystems. *Basic Applied and Ecology*, 30, 76-86.

D'Annibale, A., **Sechi, V.**, Larsen, T., Christensen, S., Krogh, P.H., Eriksen, J. (2017). Does introduction of clover in an agricultural grassland affect the food base and functional diversity of Collembola? Submitted to *Soil Biology and Biochemistry*. *Soil Biology and Biochemistry*, 112: 165-176.

Mulder, C., **Sechi, V.**, Woodward, G., & Bohan, D. (2017). Ecological Networks in Managed Ecosystems: Connecting Structure to Services. In J. Moore, P. De Ruiter, K. McCann, & V. Wolters (Eds.), *Adaptive Food Webs: Stability and Transitions of Real and Model Ecosystems* (pp. 214-227). Cambridge: Cambridge University Press. doi:10.1017/9781316871867.016

Sechi, V., de Goede, G.M.R., Rutgers, M., Brussaard, L., & Mulder, C. (2017). A community trait-based approach to ecosystem functioning in soil. *Agriculture, Ecosystems & Environment*, 239: 265-273.

Sechi, V., Brussaard, L., De Goede, R.G.M., Rutgers, M. & Mulder, C. (2015). Choice of resolution by functional trait or taxonomy affects allometric scaling in soil food webs. *The American Naturalist*, 185, 142-149.

Sechi, V., D'Annibale, A., Ambus, P., Sárossy, Z., Krogh, P.H., Eriksen, J. et al. (2014). Collembola feeding habits and niche specialization in agricultural grasslands of different composition. *Soil Biology and Biochemistry*, 74, 31-38.

Sechi, V., D'Annibale, A., Maraldo, K., Johansen, A., Bossi, R., Jensen, J. et al. (2014). Species composition of a soil invertebrate multi-species test system determines the level of ecotoxicity. *Environmental Pollution*, 184, 586-596.

D'Annibale, A., Larsen, T., **Sechi, V.**, Cortet, J., Strandberg, B., Vincze, É. et al. (2015). Influence of elevated CO₂ and GM barley on a soil mesofauna community in a mesocosm test system. *Soil Biology and Biochemistry*, 84, 127-136.

ORAL PRESENTATIONS AT INTERNATIONAL CONFERENCES

Carbon farming and sustainable peatland management, *Forum for the Future Agriculture (FFA) 2021*, online, March 2021

A community trait-based approach to ecosystem functioning in soil. *ECOSUMMIT 2016*, Montpellier, France, August 2016

Species composition of a soil invertebrate multi-species test system determines the level of ecotoxicity. *SETAC Europe 24th Annual Meeting*, Basel, Switzerland, May 2014.

A soil mesocosm performed as a standard ecotoxicological test procedure with soil invertebrates exposed to α -cypermethrin". *13th Nordic Soil Zoology Symposium*, Lammi Biological Station, Finland, August 2011.