



Nicolás Riveras Muñoz

PHD CANDIDATE

Soil science and geomorphology, University of Tübingen

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Education

Soil Science and Geomorphology, University of Tübingen

Expected 2023

Ph.D. candidate in Natural Sciences

Faculty of Agricultural Sciences, University of Chile

2017

M.Sc. in Soil and Water Management

Professional Title of Agricultural Engineer

B.Sc. in in Agricultural Sciences

Research interests

Environment; Agriculture; Soil Sciences; Remote sensing; Soil–Plant–Atmosphere interactions; Soil Physics

Technical Skills

QGIS, Google Earth Engine, AutoCAD, MySQL, MS Office, Agisoft, Python, R, VBA, Java, Arduino.

Professional experience

- **University of Tübingen** Germany, 2018 - present
Doctoral candidate: in project *EarthShape DFG-SPP 1803, Phase II Project 3: Microbial Engineers - Drivers of Earth Surface Development and Stabilization*. Experience in field campaigns, laboratory and data analysis, attendance to scientific conferences, and publication of scientific papers.
- **Agrinnova SpA.** Chile, 2018
Co-founder: Company oriented to soil studies and water management, consulting for INDAP (Agricultural Development Institute) farmers, irrigation projects for the University of Chile, and soil studies for multiple clients related to the solar energy and mining industry.
- **Gestión Ambiental Consultores S.A.** Chile, 2018
Soil Specialist: soil baselines for solar energy projects along Chile.
- **Gestión Ambiental Consultores S.A.** Chile, 2019
Soil, landscape and territory specialist: baselines for medium and large mining projects.
- **Independant consultant** Chile, 2017
Soil Specialist: soil baselines and environmental impact assesment of construction, agriculture, solar energy and mining projects
- **MWH Américas Inc. Chile Ltda.** Chile, 2017
Soil Specialist: soil baseline for project *Donoso Landfill*
- **AT-EME S.A.** Chile, 2016
Data Scientist: manage users' databases for *agroeconomic study of the Pocuro Alto Dam*.

Publications

- **Riveras-Muñoz, N.**, Seitz, S., Witzgall, K., Rodríguez, V., Kühn, P., Mueller, C. W., Osés, R., Seguel, O., Wagner, D., & Scholten, T. (2022). Biocrust-linked changes in soil aggregate stability along a climatic gradient in the Chilean Coastal Range. *SOIL*, 8, 717-731. doi: [10.5194/soil-8-717-2022](https://doi.org/10.5194/soil-8-717-2022)

Publications (continued)

- **Riveras-Muñoz, N.**, Silva, C., Salazar, O., Scholten, T., Seitz, S., & Seguel, O. (2022). Variability of Hydraulic Properties and Hydrophobicity in a Coarse-Textured Inceptisol Cultivated with Maize in Central Chile. *Soil Systems*, 6(4), 83. doi: [10.3390/soilsystems6040083](https://doi.org/10.3390/soilsystems6040083)
- Rodriguez, V., Moskwa, L.-M., Oses, R., Kühn, P., **Riveras-Muñoz, N.**, Seguel, O., Scholten, T., & Wagner, D. (2022). Impact of Climate and Slope Aspects on the Composition of Soil Bacterial Communities Involved in Pedogenetic Processes along the Chilean Coastal Cordillera. *Microorganisms*, 10(5), 847. doi: [10.3390/microorganisms10050847](https://doi.org/10.3390/microorganisms10050847)
- Pfeiffer, M., Padarian, J., Osorio, R., Bustamante, N., Olmedo, G. F., Guevara, M., Aburto, F., Albornoz, F., Antilén, M., Araya, E., Arellano, E., Barret, M., Barrera, J., Boeckx, P., Briceño, M., Bunning, S., Cabrol, L., Casanova, M., Cornejo, P., Corradini, F., Curaqueo, G., Doetterl, S., Duran, P., Escudey, M., Espinoza, A., Francke, S., Fuentes, J. P., Fuentes, M., Gajardo, G., García, R., Gallaud, A., Galleguillos, M., Gomez, A., Hidalgo, M., Ivelic-Sáez, J., Mashalaba, L., Matus, F., Meza, F., Mora, M. D. L. L., Mora, J., Muñoz, C., Norambuena, P., Olivera, C., Ovalle, C., Panichini, M., Pauchard, A., Pérez-Quezada, J. F., Radic, S., Ramirez, J., **Riveras-Muñoz, N.**, Ruiz, G., Salazar, O., Salgado, I., Seguel, O., Sepúlveda, M., Sierra, C., Tapia, Y., Tapia, F., Toledo, B., Torrico, J. M., Valle, S., Vargas, R., Wolff, M., Zagal, E. (2020). CHLSOC: the Chilean Soil Organic Carbon database, a multi-institutional collaborative effort. *Earth Syst. Sci. Data*, 12(1), 457-468. doi: [10.5194/essd-12-457-2020](https://doi.org/10.5194/essd-12-457-2020)