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### I. PUBLICACIONES (2015 – presente)

#### **Publicaciones en revistas indexadas (ISI)**

1. Piña, I., Garrido-Salinas, M., Seguel, O., Opazo, I., **Faúndez-Urbina, C.**, Verdugo-Vásquez, N., & Villalobos-Soublett, E. (2024b). Coordination between water relations strategy and carbon investment in leaf and stem in six fruit tree species. **Functional Plant Biology**, 51(9). <https://doi.org/10.1071/fp24008>
2. Piña, I., Garrido, M., Seguel, O., Opazo, I., **Faúndez, C.**, Verdugo-Vásquez, N., & Villalobos-Soublett, E. (2023). A dense tolerance to water stress: Coordination between water relations strategy and carbon investment in leaf and stem across six fruit tree species. **Research Square (Research Square)**. <https://doi.org/10.21203/rs.3.rs-3454094/v>
3. Dinamarca D, Seguel O, **Faúndez-Urbina C**, Galleguillos M (2023). CLSoilMaps: A national soil gridded database of physical and hydraulic soil properties for Chile. Sci Data. IN PRESS.
4. Camacho M, **Faúndez-Urbina CA**, Amoozegar A, Gannon T, Heitman L, Leon, R (2023). Subsurface lateral solute transport in Turfgrass. *Agronomy*, 13, no. 3:903. <https://doi.org/10.3390/agronomy13030903>;
5. Rakonjac N, van der Zee SEATM, Wipfler L, Roex E, **Faúndez-Urbina CA**, Borgers LH, Ritsema CJ. (2023). An analytical framework on the leaching potential of veterinary pharmaceuticals: A case study for the Netherlands. *Science of The Total Environment*, 859, 160310. <https://doi.org/https://doi.org/10.1016/j.scitotenv.2022.160310>.
6. **Faúndez-Urbina CA**, Kremer C, Garrido M, Seguel O, Galleguillos M,

- Honorio de Miranda J, Aponte H (2022). Simulating water content and pore electrical conductivity in olives trees with HYDRUS 2D for desert conditions. *Journal of Soil Science and Plant Nutrition*. 10.1007/s42729-022-00777-0..
7. Wu J, Nunes JP, Baartman JEM, **Faúndez-Urbina CA**. (2021). Testing the impacts of wildfire on hydrological and sediment response using the OpenLISEM model. Part 1: Calibration and evaluation for a burned Mediterranean forest catchment. *CATENA*, 207, 105658. <https://doi.org/10.1016/j.catena.2021.105658>..
  8. Kremer C, **Faúndez-Urbina CA**, Beyá-Marshall V, Franck N, Muñoz-Aravena V (2021). Transpiration-use efficiency of young cactus pear plants (*Opuntia ficus-indica* L.). *International Journal of Agriculture and Natural Resources*, 48(2), 115-124. <http://dx.doi.org/10.7764/ijanr.v48i2.2255>.
  9. **Faúndez-Urbina CA**, van Dam J, Tang D, Gooren H, Ritsema C (2021). Estimating macropore parameters for HYDRUS using a meta-model. *European Journal of Soil Science*. 72: 2006– 2019. <https://doi.org/10.1111/ejss.13103>.
  10. **Faúndez-Urbina CA**, van Dam J, van den Berg F, Ritsema CJ, Tang DWS (2020). Determination of the relative macroporosity and the effective aggregate width for different macropore geometries with disk infiltrometers. *Vadose Zone Journal*. 19: e20048. <https://doi.org/10.1002/vzj2.20048>.
  11. **Faúndez-Urbina CA**, van den Berg F, van Dam JC, Tang DWS, Ritsema CJ (2020). Parameter sensitivity of SWAP–PEARL models for pesticide leaching in macroporous soils. *Vadose Zone Journal*. 19: e20075. <https://doi.org/10.1002/vzj2.20075>.
  12. **Faúndez-Urbina CA**, van Dam JC, Hendriks RFA, van den Berg F, Gooren HPA, Ritsema CJ (2019). Water Flow in Soils with Heterogeneous Macropore Geometries. *Vadose Zone Journal*. 18:190015. doi:10.2136/vzj2019.02.0015.
  13. Galleguillos M, Jacob F, Prévot L, **Faúndez-Urbina CA**, Bsaibes A (2017). Estimation of actual evapotranspiration over a rainfed vineyard using a 1-D water transfer model: A case study within a Mediterranean watershed. *Agricultural Water Management*, 184, 67-76.

14. Márquez D, **Faúndez-Urbina CA**, Aballay E, Haberland J, Kremer C (2017). Assessing the vertical movement of a nematicide in a sandy loam soil and its correspondence using a numerical model (HYDRUS 1D). *Journal of Soil Science and Plant Nutrition*, 17(1), 167-179.

## **II. EXPERIENCIA EN PROYECTOS DE INVESTIGACION (2015 – presente)**

### ***Proyectos con fondos concursables***

2023-2026. **Investigador Principal. FONDECYT DE INICIACIÓN 11230533, ANID.** Field-scale estimation of macropore parameters for dual permeability models: An integrative approach incorporating pore-scale modeling and applied geophysics.

2021-2023. **Investigador Asociado. FIA nacional PYT-2021-0186, FIA.** Desarrollo y pilotaje de un sistema de evaluación y monitoreo de sistemas de riego a escala espacial real, tridimensional y de alta resolución.

2021-2024. **Co-Investigador. FONDECYT REGULAR 1210932, ANID.** Improving forest water yield and productivity quantification at the catchment scale by mapping root depth and eco-physiological thresholds with remote sensing and water transfer models

2021-2024. **Co-Investigador. Proyecto red estructural/red temática URORED21992, MINEDUC.** Sistema articulado de investigación en cambio climático y sustentabilidad de zonas costeras de Chile.