

DOCTORADO EN CIENCIAS AGROALIMENTARIAS

Ítalo Cuneo Arratia

Publicaciones (2017- 2021)

1. Barrientos-Sanhueza, C., Mondaca, P., Tamayo, M., Alvaro, J.E., Diaz, A., **Cuneo, I.F.** 2021. Enhancing the mechanical and hydraulic properties of coarse quartz sand using a water-soluble hydrogel based on bacterial alginate for novel application in agricultural contexts. *Soil Science Society of America Journal*. Q3.
2. Salgado, E., Livellara, N., Chaigneau, E., Varas, F., **Cuneo, I.** 2021. Hourly Relationship between Reference Evapotranspiration and Shoot Shrinkage in Walnut Trees and Pomegranate under Deficit Irrigation. *Plants*, 11, 31. Q1.
3. Lindh, V., Uarrota, V., Zulueta, C., Alvaro, J.E., Valdenegro, M., **Cuneo, I.F.**, Mery, D., Pedreschi, R. 2021. Image Analysis Reveals That Lenticel Damage Does Not Result in Black Spot Development but Enhances Dehydration in *Persea americana* Mill. cv. Hass during Prolonged Storage. *Agronomy-Basel*, 11: 9. Q1.
4. Reingwirtz, I., Uretsky, J., **Cuneo, I.F.**, Knipfer, T., Reyes, C., Walker, M.A., McElrone, A. 2021. Inherent and Stress-Induced Responses of Fine Root Morphology and Anatomy in Commercial Grapevine Rootstocks with contrasting Drought resistance. *Plants*, 10: 1121. Q1.
5. Rojas, G., Fernandez, E., Whitney, C., Luedeling, E., **Cuneo, I.F.** 2021. Adapting sweet cherry orchards to extreme weather events – Decision Analysis in support of farmers’ investments in central Chile. *Agricultural Systems*, 187: 103031. Q1.
6. Beyer, C.P., **Cuneo, I.F.**, Alvaro, J.E., Pedreschi, R. 2021. Evaluation of aerial and root plant growth behavior, water and nutrient use efficiency and carbohydrate dynamics for Hass avocado grown in a soilless and protected growing system. *Scientia Horticulturae*, 277: 109830. Q1.
7. **Cuneo, I.F.**, Barrios-Masias, F., Knipfer, T., Uretsky, J., Reyes, C., Lenain, P., Brodersen, C., Walker, M.A., McElrone, A. 2021. Differences in grapevine rootstock sensitivity and recovery from drought are linked to fine root cortical lacunae and root tip function. *New Phytologist*, 229: 272-283. Q1.
8. Fernandez, E., **Cuneo, I.F.**, Whitney, C., Luedeling, E. 2020. Prospects of decreasing winter chill for deciduous fruit production in Chile throughout the 21st century. *Climatic Change* 159: 423-439. Q1.
9. Alvarado, L., Saa, S., **Cuneo, I.F.**, Pedreschi, R., Morales, J., Larach, A., Barros, W., Besoain, X. 2020. A comparison of immediate and short-term defensive responses to *Phytophthora* species infection in both susceptible and resistant walnut rootstocks. *Plant Disease*, 104: 921-929. Q1.

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10. Morales, J., Besoain, X., **Cuneo, I.F.**, Larach, A., Alvarado, L., Cáceres-Mella, A., Saa, S. 2019. Impact of Nitrogen Fertilization on *Phytophthora cinnamomi* Root-related Damage in *Juglans regia* Saplings. HortScience 54: 2188-2194. Q2.
11. Fernandez, E., **Cuneo, I.F.**, Luedeling, E., Alvarado, L., Farías, D., Saa, S. 2019. Starch and hexoses concentrations as physiological markers in dormancy progression of sweet cherry twigs. Trees 33: 1187-1201. Q2.
12. Knipfer, T., Barrios-Masias, F., **Cuneo, I.F.**, Bouda, M., Albuquerque, P., Brodersen, C., Kluepfel, D.A., McElrone, A.J. 2018. Variations in xylem embolism susceptibility under drought between intact saplings of three walnut species. Tree Physiology 38: 8; 1180-1192. Q1.
13. Cáceres-Mella, A., Ribalta-Pizarro, C., Villalobos-González, L., **Cuneo, I.F.**, Pastenes, C. 2018. Controlled water deficit modifies the phenolic composition and sensory properties in Cabernet Sauvignon wines. Scientia Horticulturae 237: 105-111. Q1.
14. **Cuneo, I.F.**, Knipfer, T., Mandal, P., Brodersen, C., McElrone, A. 2018. Water uptake can occur through woody portions of roots and facilitates localized embolism repair in grapevine. New Phytologist 218: 506-516. Q1.
15. Knipfer, T., **Cuneo, I.F.**, Mason, J., Reyes, C., Brodersen, C., McElrone, A. 2017. Storage compartments for capillary water rarely refill in an intact woody plant. Plant Physiology 175: 1649-1660. Q1.

Proyectos con financiamiento externo últimos 5 años (adjudicado y/o ejecutado)

1. Rootstocks/scion hydraulic interaction: unraveling the contribution of root apoplastic, symplastic and transcellular water transport pathways on scion physiological performance
Financiamiento: Fondecyt Regular
Rol: Co- investigador
Duración: 2019-2023
Año de adjudicación: 2019
2. Understanding how drought stress affects water uptake capacity at different developmental zones along the length of grapevine fine roots
Financiamiento: Fondecyt de Iniciación
Rol: Investigador responsable
Duración: 2018-2021
Año adjudicación: 2018
3. Phenological and Social Impacts of Temperature Increase - A Case Study of Two countries
Financiamiento: Federal Ministry of Education and Research (BMBF)
Rol: Co-investigador
Duración: 2017-2020
Año de adjudicación: 2017