

DOCTORADO EN CIENCIAS AGROALIMENTARIAS

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**Publicaciones (2017- 2021)**

1. Delgado, N., Olivera, M., Cádiz, F., Bravo, G., Montenegro, I., Madrid, A., **Fuentealba, C.**, Pedreschi, R., Salgado, E., Besoain, X. 2021. Volatile Organic Compounds (VOCs) produced by *Gluconobacter cerinus* and *Hanseniaspora osmophila* displaying control effect against table grape-rot pathogens. *Antibiotics-Basel*, 10: 663. Q2.
2. Gálvez-Ranilla, L., Rios-Gonzales, B.A., Ramírez-Pinto, M.F., **Fuentealba, C.**, Pedreschi, R., Shetty, K. 2021. Primary and Phenolic Metabolites Analyses, In Vitro Health-Relevant Bioactivity and Physical Characteristics of Purple Corn (*Zea mays* L.) Grown at Two Andean Geographical Locations. *Metabolites*, 11, 722. Q2.
3. **Fuentealba, C.**, Ejsmentewicz, T., Campos-Vargas, R., Saa, S., Aliaga, O., Chirinos, R., Campos, D., Pedreschi, R. 2021. Cell wall and metabolite composition of sweet cherry fruits from two cultivars with contrasting susceptibility to surface pitting during storage. *Food Chemistry*, 342: 128307. Q1.
4. Covarrubias, M.P., Lillo-Carmona, V., Melet, L., Benedetto, G., Andrade, D., Maucourt, M., Deborde, C., **Fuentealba, C.**, Moing, A., Valenzuela, M.L., Pedreschi, R., Miyasaka Almeida, A. 2021. Metabolite fruit profile is altered in response to source–sink imbalance and can be used as an early predictor of fruit quality in nectarine. *Frontiers in Plant Science*, 11: 604133. Q1.
5. Ponce, E., Alzola, B., Cáceres, N., Gas, M., Ferreira, C., Vidal, J., Chirinos, R., Campos, D., Rubilar, M., Campos-Vargas, R., Pedreschi, R., **Fuentealba, C.** 2021. Biochemical and phenotypic characterization of sweet cherry (*Prunus avium* L.) cultivars with induced surface pitting. *Postharvest Biology and Technology*, 175: 111494. Q1.
6. Hernández, I., Uarrota, V., Paredes, D., **Fuentealba, C.**, Defilippi, B.G., Campos-Vargas, R., Meneses, C., Hertog, M., Pedreschi, R. 2021. Can metabolites at harvest be used as physiological markers for modelling the softening behaviour of Chilean “Hass” avocados destined to local and distant markets? *Postharvest Biology and Technology*, 174: 111457. Q1.
7. Uarrota, V.G., Hernandez, I., Ponce, E., Vidal, J., **Fuentealba, C.**, Defilippi, B.G., Lindh, V., Zulueta, C., Chirinos, R., Campos, D., Pedreschi, R. 2020. Unravelling factors associated with ‘blackspot’ disorder in stored Hass avocado (*Persea americana* Mill) fruit. *The Journal of Horticultural Science and Biotechnology*, 95 (6): 804-815. Q2.
8. Uarrota, V.G., **Fuentealba, C.**, Hernández, I., Defilippi-Bruzzone, B., Meneses, C., Campos-Vargas, R., Lurie, S., Hertog, M., Carpentier, S., Poblete-Echeverría, C., Pedreschi, R. 2019. Integration of proteomics and metabolomics data of early and middle season T Hass avocados under heat treatment. *Food Chemistry* 289: 512-521. Q1.

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9. Gálvez, L., Huamán-Alvino, C., Flores-Báez, O., Aquino-Méndez, E.M., Chirinos, R., Campos, D., Sevilla, R., **Fuentealba, C.**, Pedreschi, R., Sarkar, D., Shetty, K. 2019. Evaluation of phenolic antioxidant-linked in vitro bioactivity of Peruvian corn (*Zea mays* L.) diversity targeting for potential management of hyperglycemia and obesity. *Journal of Food Science and Technology* 56: 2909–2924. Q3.
10. Pedreschi, R., Uarrota, V., **Fuentealba, C.**, Alvaro, J.E., Olmedo, P., Defilippi, B.G., Meneses, C., Campos-Vargas, R. 2019. Primary Metabolism in Avocado Fruit. *Frontiers in Plant Science* 10: 795. Q1.
11. Rodríguez, F., Pedreschi, R., **Fuentealba, C.**, de Kartzow, A., Olaeta, J.A., Alvaro, J.E. 2019. The increase in electrical conductivity of nutrient solution enhances compositional and sensory properties of tomato fruit cv. Patrón. *Scientia Horticulturae* 244: 388-398. Q1.
12. Muñoz, O., **Fuentealba, C.**, Ampuero, A., Figuerola, F., Estévez, A.M. 2018. The effect of *Lactobacillus acidophilus* and *Lactobacillus casei* on the in vitro bioaccessibility of flaxseed lignans (*Linum usitatissimum* L.). *Food & Function* 9: 2426-2432. Q1.
13. Zepeda, B., Olmedo, P., Ejsmentewics, T., Sepúlveda, P., Balic, I., Balladares, C., Delgado-Rioseco, J., **Fuentealba, C.**, Moreno, A., Defilippi, B., Meneses, C., Pedreschi, R., Campos-Vargas, R. 2018. Cell wall and metabolite composition of berries of *Vitis vinifera* (L.) cv. Thompson Seedless with different firmness. *Food Chemistry* 268: 492-497. Q1.
14. Ahumada-Zamora, J., **Fuentealba, C.**, Olaeta, J.A., Undurraga, P., Pedreschi, R., Shetty, K., Gálvez-Ranilla, L. 2017. Bioactive compounds of loquat (*Eriobotrya japonica* Lindl.) cv. Golden Nugget and in vitro health-relevant functional potential for hyperglycemia management. *Ciencia e Investigación Agraria* 44: 272-284. Q3.
15. Hernández, I., **Fuentealba, C.**, Olaeta, J.A., Poblete-Echeverría, C., Defilippi, B., González-Agüero, M., Campos-Vargas, R., Lurie, S., Pedreschi, R. 2017. Effects of heat shock and nitrogen shock pre-treatments on ripening heterogeneity of Hass avocados stored in controlled atmosphere. *Scientia Horticulturae* 225: 408-415. Q1.
16. **Fuentealba, C.**, Hernández, I., Olaeta, J.A., Defilippi, B., Meneses, C., Campos-Vargas, R., Lurie, S., Carpentier, S., Pedreschi, R. 2017. New insights into the heterogeneous ripening in Hass avocado via LC MSMS proteomics. *Postharvest Biology and Technology* 132: 51-61. Q1.
17. **Fuentealba, C.**, Hernández, I., Saa, S., Toledo, L., Burdiles, P., Chirinos, R., Campos, D., Brown, P., Pedreschi, R. 2017. Colour and in vitro quality attributes of walnuts from different growing conditions correlate with key precursors of primary and secondary metabolism. *Food Chemistry* 232: 664-672. Q1.
18. **Fuentealba, C.**, Quesille-Villalobos, A., Gonzalez-Muñoz, A., Saavedra, J., Shetty, K., Gálvez-Ranilla, L. 2017. Optimized methodology for the extraction of free and bound phenolic acids from native corn (*Zea mays* L.) accession. *CyTA -Journal of Food* 15: 91-98. Q3.

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19. Saavedra, J., Córdova, A., Navarro, R., Díaz-Calderón, P., **Fuentealba, C.**, Astudillo, C., Toledo, L., Enrione, J., Galvez, L. 2017. Industrial avocado waste: functional compounds preservation by convective drying process. Journal of Food Engineering 198: 81-90. Q1.

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

1. Physiological status at harvest: key to predict postharvest ripening behaviour of Chilean Hass avocado.  
Financiamiento: Fondecyt Regular N°1180303, ANID  
Rol: Co-Investigador  
Duración: 2018-2022  
Año de adjudicación: 2018
2. Red de investigación Perú-Chile: compartiendo experiencias y desafíos relacionados a la biotecnología vegetal, industrial & bioprocesos.  
Financiamiento: Redes de investigación en Biotecnología Chile-Perú REDBIO0001. Programa de Cooperación Internacional, ANID.  
Rol: Investigadora asociada  
Duración: 2019-2021  
Año adjudicación: 2019
3. An integrative approach to understand surface pitting in sweet cherries  
Financiamiento: FONDECYT de Iniciación en Investigación 11170360  
Rol: Investigador Responsable  
Duración: 2017- 2020  
Año adjudicación: 2017