

DOCTORADO EN CIENCIAS AGROALIMENTARIAS

**Andrés Córdova Suárez**

**Publicaciones (2016- presente)**

1. Astudillo-Castro C, **Córdova A**, Oyanedel-Craver V, Soto-Maldonado C, Valencia P, Henriquez P, Jimenez-Flores R. 2020. Prediction of the Limiting Flux and Its Correlation with the Reynolds Number during the Microfiltration of Skim Milk Using an Improved Model. *Foods* 9:1621. Q1.
2. Henríquez C, Sarkar D, Molina J, Sepúlveda S, **Córdova A**, Saavedra J, Shetty K. 2020. Improving antioxidant and anti-hyperglycemic activity in cereal and apple-based food formulations using bioactive ingredients from apple peel. *Journal of Food Processing and Preservation* 44 :e14609. Q3.
3. Alister C, Araya M, **Córdova A**, Saavedra J, Kogan M. 2020. Humic substances and their relation to pesticide sorption in eight volcanic soils. *Planta Daninha*, v38: e020171636. Q4.
4. **Córdova A**, Astudillo-Castro C, Ruby-Figueroa R, Valencia P, Soto C. 2020. Recent advances and perspectives of ultrasound assisted membrane food processing. *Food Research International* 133: 109163. Q1.
5. Vera C, Guerrero C, Aburto C, **Córdova A**, Illanes A. 2020. Conventional and non-conventional applications of  $\beta$ -galactosidases. *Biochimia et Biophysica Acta: Proteins and Proteomics*: 1868: 140271. Q2.
6. Santibañez L, **Córdova A**, Astudillo C, Illanes A. 2019. Effect of the lactose hydrolysis on galacto-oligosaccharides mixtures subjected to nanofiltration: a detailed fractionation analysis. *Separation and Purification Technology*, 222: 342-353.Q1.
7. **Córdova A**, Saavedra J, Mondaca V, Vidal J, Astudillo-Castro C. 2019. Quality assessment and multivariate calibration of 5-HMF during a concentration process for clarified apple juice. *Food Control* 95: 106-111. Q1.
8. Henriquez M, Loewe V, Saavedra J, **Córdova A**, Lutz M. 2018. Effect of the type of packaging on the oxidative stability of pine nuts grown in Chile. *CyTA Journal of Food* 16: 255-262.Q3.
9. Saavedra J, **Córdova A**, Navarro R, Díaz-Calderón P, Astudillo-Castro C, Toledo L, Enrione J, Gálvez L. 2017. Industrial avocado waste: Functional compounds preservation by convective drying process. *Journal of Food Engineering* 198:81-90. Q1.
10. **Córdova A**, Astudillo, C, Santibañez C, Cassano A, Ruby R, Illanes A. 2017. Purification of galacto-oligosaccharides (GOS) by three-stage serial nanofiltration units under critical transmembrane pressure conditions. *Chemical Engineering Research and Design* 117: 488-499. Q2.

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11. Vera C, **Córdova A**, Aburto C, Guerrero C, Suárez S, Illanes A. 2016. Synthesis and Purification of galacto-oligosaccharides: state of art. World Journal of Microbiology and Biotechnology 32:197. Q3.
12. **Córdova A**, Astudillo C, Vera C, Guerrero C, Illanes A. 2016. Performance of an ultrafiltration membrane bioreactor (UF-MBR) as a processing strategy for the synthesis of galacto-oligosaccharides at high substrate concentrations. Journal of Biotechnology 223: 26-35. Q2.
13. **Córdova A**, Astudillo C, Vera C, Guerrero C, Illanes A. 2016. Assessment of the fouling mechanisms of an ultrafiltration membrane bioreactor during synthesis of galacto-oligosaccharides: effect of the operational variables. Desalination 393: 79-89. Q1.
14. **Córdova A**, Astudillo C, Giorno L, Guerrero C, Illanes A, Cassano A. 2016. Nanofiltration potential for the purification of highly concentrated enzymatically produced oligosaccharides. Food and Bioproducts Processing 98 :50-61. Q2.

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

1. Novel enzyme membrane bioreactors (MBR) for the synthesis of prebiotic oligosaccharides.  
Financiamiento: FONDECYT Iniciación 11200054  
Rol: Investigador Responsable  
Duración: 2020-2023  
Año adjudicación: 2020
2. Ultrafiltration membrane bioreactors (UF-MBR) assisted by ultrasound as strategy to improve the quality of Apple juice concentrates and upgrade pomaces: process modeling under a multivariate approach.  
Financiamiento: FONDECYT Postdoctorado 3170133  
Rol: Investigador responsable  
Duración: 2017-2020  
Año adjudicación: 2017
3. Diseño, construcción y validación de un reactor prototipo UV LED a escala laboratorio para inactivación microbiana y estabilización de vinos.  
Financiamiento: ID18I10146 FONDEF  
Rol: Investigador postdoc  
Duración: 2019-2021  
Año adjudicación: 2019
4. Voucher de Innovación en PYMES : "Determinación de parámetros de operación para la extensión de vida útil de membranas poliméricas en la Nanofiltración del suero de leche, Agroindustrial Codigua SPA.  
Financiamiento: CORFO 15VIP 43848  
Rol: Investigador responsable  
Duración: 2015-2016

FACULTAD DE  
CIENCIAS AGRONÓMICAS  
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## DOCTORADO EN CIENCIAS AGROALIMENTARIAS

Año adjudicación: 2015

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