

DR. AGUSTÍN RASCÓN CHU
BIOTECNOLOGÍA AGROINDUSTRIAL-CTAOV

CAPÍTULOS DE LIBROS

1. **Rascón-Chu, A.***, Gomez-Rodriguez, G.H., Carvajal-Millan, E., Campa-Mada, A.C. (2019). Chapter 10. Pectin in drug delivery applications. In: Natural polysaccharides in drug delivery and biomedical applications. Hasnain, M.S., Nayak, A.K. (Eds.). Elsevier Inc.-Academic Press: San Diego, USA. ISBN 978-0-12-817055-7. Pp. 249-262.
2. De Anda-Flores, Y., **Rascón-Chu, A.**, Campa-Mada, A., Lizardi-Mendoza, J., Tanori-Cordova, J., Carvajal-Millan, E. (2019). Chapter 17. Polysaccharides nanoparticles as oral drug delivery system. In: Natural polysaccharides in drug delivery and biomedical applications. Hasnain, M.S., Nayak, A.K. (Eds.). Elsevier Inc.-Academic Press: San Diego, USA. ISBN 978-0-12-817055-7. Pp. 399-417.
3. Paz-Samaniego, R., Sotelo-Cruz, N., Marquez-Escalante, J., Rascon-Chu, A., Campa-Mada, A.C., **Carvajal-Millan, E.*** (2019). Chapter 18. Nixtamalized maize flour by-product as a source of health-promoting ferulated arabinoxylans (AX). In: Flour and breads and their fortification in health and disease prevention. 2nd Edition. Preedy, V.R., Watson, R.R. (Eds.). Elsevier Inc.-Academic Press: London, UK. ISBN 978-0-12-814639-2. Pp. 225-235.
4. Urias-Orona, V., **Rascón-Chu, A.***, Márquez-Escalante, J., Martínez-Robinson, K.G., Campa-Mada, A.C. (2018). Chapter 4. Effect of calcium content on the gelation of low methoxy chickpea pectin. In: Research Methodology in Food Sciences. Integrated Theory and Practice. Mohan, C.O., Carvajal-Millan, E., Ravishankar, C.N. (Eds.). Apple Academic Press, Inc: New Jersey. ISBN: 9781771886246. Pp. 59-67.
5. Ramírez-Chavez, N., Salmerón-Zamora, J., Carvajal-Millan, E., Martínez-Robinson, K., Pérez-Leal, R., **Rascón-Chu, A.** (2018). Chapter 5. Antioxidant activity and gelling capability of β -glucan from a drought harvested oat. In: Research Methodology in Food Sciences. Integrated Theory and Practice. Mohan, C.O., Carvajal-Millan, E., Ravishankar, C.N. (Eds.). Apple Academic Press, Inc: New Jersey. ISBN: 9781771886246. Pp. 69-80.
6. Carvajal-Millan, E., Marquez-Escalante, J., Martinez-Lopez, A.L., **Rascon-Chu, A.** (2018). Chapter 1. Covalent cross-linking content, rheological, and structural characteristics of wheat water-extractable and water-unextractable ferulated arabinoxylan gels. In: Food Process Engineering and Quality Assurance. Mohan C.O., Carvajal-Millan E., Ravishankar C.N., Haghi A.K. (Eds.). Apple Academic Press, Inc.: New Jersey, US. (ISBN: 978-1-77188-576-8). Pp. 3-17.
7. Ramírez-Chávez, N., Carvajal-Millan, E., Salmeron-Zamora, J., **Rascón-Chu, A.**, Toledo-Guillén, A.R., Ponce de León-Renova, N. (2018). Chapter 4. Ferulated arabinoxylans and beta-glucans as fat replacers in yoghurt and their effects on sensorial properties. In: Food Process Engineering and Quality Assurance. Mohan C.O., Carvajal-Millan E., Ravishankar C.N., Haghi A.K. (Eds.). Apple Academic Press, Inc.: New Jersey, US. (ISBN: 978-1-77188-576-8). Pp. 61-70.
8. **Rascón-Chu, A.***, Martínez-López, A.L., Carvajal-Millan, E., Romo-Chacón, A. Chapter 5. Laccase production by *Trametes versicolor* and *Armillaria mellea* using maize brand as support-substrate and its dye decolorization potencial as affected by pH. (2018). In: Food Process Engineering and Quality Assurance. Mohan C.O., Carvajal-Millan E., Ravishankar

C.N., Haghi A.K. (Eds.). Apple Academic Press, Inc.: New Jersey, US. (ISBN: 978-1-77188-576-8). Pp. 71-84.

9. Morales-Burgos, A.M., Carvajal-Millan, E., Sotelo-Cruz, N., Campa-Mada, A.C., **Rascón-Chu, A.**, Lopez-Franco, Y., Lizardi-Mendoza, J. (2018). Chapter 4. Polysaccharides in alternative methods for insulin delivery. In: Biopolymer Grafting: Synthesis and Properties. Thakur V.K. (Ed.). Elsevier, Inc.: Amsterdam (ISBN: 978-0-323-48104-5). Pp. 175-197.
10. Morales-Burgos, A.M., Carvajal-Millan, E., López-Franco, Y.L., Sotelo-Cruz, N., **Rascón-Chu, A.**, Lizardi-Mendoza, J., Campa Mada, A.C. (2017). Chapter 5. Cereal arabinoxylans: bioactive polysaccharide and potential additive in foods and pharmaceutical products. In: Agricultural Research Updates. Volume 17. Gorawala P. and Mandhatri S. (Eds.). Nova Science Publishers, Inc.: New York (ISBN: 978-1-53610-907-8). Pp. 135-159.
11. Marquez-Escalante, J.A., Carvajal-Millan, E., López-Franco, Y.L., Lizardi-Mendoza, J., Valenzuela-Soto, E., **Rascón-Chu, A.**, Faulds, C. (2017). Chapter 1. Gels of water extractable arabinoxylans from a bread wheat variety: swelling and microstructure. In: Advances in Physicochemical Properties of Biopolymers, Part 1. Masuelli, M. and Renard, D. (Eds.). Bentham Science Publishers: Potomac, USA. ISBN: 978-1-68108-454-1. Pp. 1-12.
12. **Rascón-Chu, A***, Díaz-Baca, J.A., Carvajal-Millan, E., López-Franco, Y.L., Lizardi-Mendoza, J. (2016). New uses for an "old" polysaccharide: Pectin-based composite materials. In: Handbook of Sustainable Polymers: Structure and Chemistry. Thakur V.K. and Thakur M.K. (Eds.). Pan Stanford Publishing Pte. Ltd:Singapore. (ISBN: 978-981-4613-55-2). Pp. 71-107.
13. Paz-Samaniego, R., Carvajal-Millan, E., Brown-Bojorquez, F., **Rascón-Chu, A.**, López-Franco, Y.L., Sotelo-Cruz, N., Lizardi-Mendoza, J. (2015). Gelation of Arabinoxylans from Maize Wastewater: Effect of Alkaline Hydrolysis Conditions on the Gel Rheology and Microstructure. In: Wastewater Treatment Engineering. Samed, M. (Ed.). InTech:Croatia. (ISBN: 978-953-51-2179-4). DOI: 10.5772/61022. Pp. 101-114.
14. Silva-Escalante, P., Carvajal-Millán, E., Santana-Rodríguez, V., **Rascón-Chu, A.**, Márquez-Escalante J.A., Martínez-López, A.L., Campa-Mada, A.C. (2015). Physicochemical and gelling properties of ferulated arabinoxylans from different maize cultivars. In: Agricultural Research Updates, Vol. 11. Gorawala, P., Mandhatri, S. (Ed.). Nova Science Publishers, Inc.: New York. (ISBN: 978-1-63482-968-7). Pp. 133-143.
15. Paz-Samaniego, R., Méndez-Encinas, M., Fierro-Islas, J.M., Marquez-Escalante, J., **Rascón-Chu, A.**, Martínez-Lopez, A.L., Carvajal-Millan, E. (2015). Ferulated arabinoxylans recovered from low-value maize by-products: Gelation and antioxidant capacity. In: Ferulic Acid: Antioxidant Properties, Uses and Potential Health Benefits. Warren, B. (Ed.). Nova Science Publisher, Inc.: NewYork. (ISBN: 978-1-63463-299-7). Pp. 151-164.
16. Marquez-Escalante, J.A., Martínez-López, A.L., Carvajal-Millan, E., López-Franco, Y.L., Lizardi-Mendoza, J., Valenzuela-Soto, E.M., **Rascón-Chu, A.**, Faulds, C. (2015). Antioxidant capacity of enzymatically modified ferulated arabinoxylans and their gels. In: Ferulic Acid. Antioxidant Properties, Uses and Potential Health Benefits. Warren, B. (Ed.). Nova Science Publisher, Inc.: NewYork. (ISBN: 978-1-63463-299-7). Pp. 135-150.
17. Martínez-López, A.L., Carvajal-Millan, E., López-Franco, Y.L., Lizardi-Mendoza, J., **Rascón-Chu, A.** (2014). Antioxidant activity of maize bran arabinoxylan microspheres. In: Food Composition and Analysis. Methods and Strategies. Haghi, A.K., Carvajal-Millan, E. (Eds.). Apple Academic Press, Inc.: New Jersey. (ISBN: 978-1-92-689-585-7). Pp. 19-28.
18. Morales-Ortega, A., Carvajal-Millan, E., Torres-Chavez, P., **Rascón-Chu, A.**, Lizardi-Mendoza, J., López-Franco, Y. (2014). Cross-Linking of ferulated arabinoxylans extracted

from a Mexican wheat flour: Rheology and microstructure of the gel. In: Food Composition and Analysis. Methods and Strategies. Haghi, A.K., Carvajal-Millan, E. (Eds.). Apple Academic Press, Inc.: New Jersey. (ISBN: 978-1-92-689-585-7). 169-179.

19. **Rascon-Chu, A***, Escarcega-Loya, K., Carvajal-Millan, E., Sánchez A. (2014). Free and ester-linked ferulic acid content in a hard-to-cook pinto bean (*Phaseolus vulgaris L.*) Variety. In: Food Composition and Analysis. Methods and Strategies. Haghi, A.K., Carvajal-Millan, E. (Eds.). Apple Academic Press, Inc.: New Jersey. (ISBN: 978-1-92-689-585-7). Pp. 181-186.
20. Carvajal-Millan, E., Toledo-Guillén, A.R., Campa-Mada, A.C., Martínez-Robinson, K.G., **Rascón-Chu, A.** (2012). Enzymatic xylose release from wheat bran arabinoxylans: Solubilizing water unextractable arabinoxylans. In: Xilose, Production, Consumption, and Health Benefits. Xu P., Luo M. (Eds). Nova Science Publisher, Inc.: NewYork. (ISBN: 978-1-62-100-758-6). Pp. 157-165.
21. Martínez-López AL., Carvajal-Millan, E., Lizardi-Mendoza, J., López-Franco, Y.L., **Rascón-Chu, A.**, Salas-Muñoz, E., Ramírez-Wong, B. (2012). Ferulated arabinoxylans as by product from maize wet-milling process: Characterization and gelling capability. In: Maize: Cultivation, Uses and Health Benefits. Jiménez-López J.C. (Ed). Nova Science Publisher, Inc.: NewYork. (ISBN: 978-62081-514-4). Pp. 65-73.
22. **Rascón-Chu A***, Urías-Orona V., Sánchez A., Carvajal-Millán E. (2012). Pectin Extraction, Gelation and Sources. In: Handbook of Analysis of Active Compounds in Functional Foods. Nollet L.M.L, Toldrá F. (eds). CRC Press, Taylor & Francis Group: Boca Raton, FL. ISBN: 978-1-4398-1588-5. Pp. 583-592.
23. **Rascón-Chu, A***, Escárcega-Loya, K., García-Sánchez, G., Carvajal-Millán, E., Romo-Chacón, A., Márquez-Escalante, J. (2012). Ferulic acid content and antioxidant capacity in pinto bean (*Phaseolus vulgaris L.*) varieties. In: Food Science Research and Technology. Editor: Haghi, AK. Apple Academic Press: New Jersey. ISBN: 978-1-926895-01-7. Pp. 98-102.
24. Urias-Orona, V., **Rascón-Chu, A***, Lizardi-Mendoza, J., Carvajal-Millán, E. Gardea, A.A., Islas-Rubio, A.R. (2012). Extraction, composition and functional properties of pectin from chickpea husk. In: Food Science: Research and Technology. Haghi, A.K. (ed). Apple Academic Press: New Jersey. ISBN: 978-1-926895-01-7. Pp. 20-27.
25. Niño-Medina, G., Carvajal-Millán, E., Lizardi, J., **Rascón-Chu, A.**, Gardea, A. (2011). Chapter 50: Feruloylated arabinoxylans recovered from low-value maize by-products. In: Encyclopedia of Polymer Research. Jones, C.E. (ed). NovaScience: NewYork. ISBN: 978-1-61761-926-7. Pp. 1401-1416.
26. Ramos-Chavira, N.C., Carvajal-Millan, E., Campa Mada, A.C., **Rascon-Chu, A.**, Santana-Rodriguez, V.M., Salmerón-Zamora, J.J., Quintero-Ramos, A. (2011). Oat gum from oat genotypes harvested under different irrigation conditions: Extraction, characterization and gelling capability. In: Oats: Cultivation, Uses and Health Effects. Murphy, D.L. (Ed). Nova Science Publishers, Inc: New York. ISBN: 978-1-61324-277-3. Pp. 147-156.
27. Berlanga Reyes C., Carvajal Millan E., Niño Medina G., **Rascón Chu A.**, Ramírez Wong B., Magaña Barajas E. (2011). Low-Value Maize and Wheat By-Products as a Source of Ferulated Arabinoxylans. In: Waste Water-Treatment and Reutilization. García- Einschlag, F.S. (Ed). InTech: Croatia. ISBN: 978-953-307-249-4.. Pp. 341-352.
28. Holguin-Acuña, AL., Ramos-Chavira, N., Carvajal-Millan, E., Santana-Rodriguez, V., **Rascón-Chu, A.**, Niño-Medina, G. (2011). Non-starch polysaccharides in maize and oat: Ferulated arabinoxylans and β -glucans. In: Flour and Breads and their Fortification in Health

and Disease Prevention. Editor: V.R. Preedy, R.R. Watson and V.B. Patel. Elsevier: United States. ISBN: 978-0-12-380886-8. Pp. 153-159.

29. Niño-Medina, G., Carvajal-Millan, E., Lizardi, J., **Rascón-Chu, A.**, Gardea, A. (2010). Chapter 25. Feruloylated arabinoxylans recovered from low-value maize by-products. In: Handbook of Carbohydrate Polymers: Development, Properties and Applications. (Ryouichi Ito & Youta Matsuo eds). Nova Science Publishers, Inc.: New York. ISBN: 978-1-60876-367-2. Pp. 711-725.
30. Llamas, J., Carvajal-Millán, E., **Rascón-Chu, A.**, Orozco, J.A., Gardea, A.A. (2001). Microcalorimetry: an Accurate Tool for Expedite Determinations of Plant Tissue Metabolism. ISBN: 978-90-66059-94-8. ISHS Acta Horticulturae, 565: 79-85.