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Abstract

Effects of Extrusion Cycles on the Formation of Type 3 Resistant Starch †

Romero-García Monica [1], Gaytán-Martínez Marcela [1,*], Morales-Sánchez Eduardo [2] and Cabrera-Ramírez Angel [2]

[1] Posgrado en Ciencia y Tecnología de los Alimentos, Research and Graduate Program in Food Science, School of Chemistry, Universidad Autónoma de Querétaro, Queretaro 76010, Mexico; mrg.nut@hotmail.com
[2] Instituto Politécnico Nacional, CICATA-IPN Unidad Querétaro, Cerro Blanco No. 141, Col. Colinas del Cimatario, Santiago de Querétaro, Queretaro 76090, Mexico; emoraless@ipn.mx (M.-S.E.); angel_humbert00@hotmail.com (C.-R.A.)
* Correspondence: marcelagaytanm@yahoo.com.mx
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Abstract: The present work was to evaluate the formation of type III resistant starch in Hylon VII starch by the cycle's extrusion process. The starch was subjected to three extrusion cycles. Starch viscosity, structural and thermal properties were determined. Results have shown that thermal properties had a decrease in the enthalpy, a decrease in the viscosity, and a loss in the crystallinity pattern because of the cycle's extrusion. The type III resistant starch decreased for each extrusion cycle, due to the gelatinization process that occurred during the extrusion cycles.

Keywords: resistant starch; extrusion; starch

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