



RESISTANT STARCH CONTENT AND STRUCTURAL CHANGES IN MAIZE (ZEA MAYS) TORTILLAS DURING STORAGE.

ABSTRACT

In the last decade increased isolation of starches from plant sources not conventional chemical modification of these starches from unconventional sources can produce starches with better physicochemical and functional properties that do not present the commercial starches. Was acetylated and oxidized banana starch and evaluated its thermal properties, formation and rheological pastas. The low content of carbonyl and carboxyl groups can be due to the botanical source of starch. Banana Acetylated starch presented a low substitution (0.04). The acetylated starch showed a lower gelatinization temperature and enthalpy of the native and oxidized starches, and had a higher peak viscosity profile compared viscoamilográfico native starch. The oxidized starch showed the peak viscosity during the cooling stage and the three starches showed increases in viscosity during the cooling stage showing a formation of gel. Native starches, acetylated and oxidized showed non-Newtonian behavior reofludizante type. The rotational test showed that oxidized starch gel showed a firmer than acetylated starch, which agrees with the results viscoamilográficos.

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