

## **ABSTRACT**

Starches from different sources present unknown potential for new technological applications mainly when modifications are considered. In the present study acid-alcoholic treatments of *Carioca* bean starch were evaluated considering selected physicochemical and thermal properties. Ethanol, methanol and their mixture (1:1) were employed as solvents for hydrochloric acid hydrolysis of bean starch. The results showed changes in DSC parameters, including gelatinisation temperatures that increased from around 70 to 80 °C and enthalpy changes that decreased from around 10 to 4 J g<sup>-1</sup>. The viscographic behaviour analysed by RVA, L\*, a\* and b\* colour parameters and also some changes in the granular morphology by SEM were observed. On the other hand, no changes were detected for the relative crystallinity by X ray diffraction. The acid alcoholic treatment resulted in different starch properties including the expected acid thinning due to depolymerisation.