

عنوان مقاله:

Physicochemical properties of native and pre-gelatinized wheat starches in the presence of different concentrations of acetic acid

محل انتشار:

اولین کنفرانس بین المللی صمغ های بومی و کاربرد آن در صنعت غذا (سال: 1393)

تعداد صفحات اصل مقاله: 4

نویسندگان:

Zahra Kaveh - *Department of Food Science and Technology, School of Agriculture, Shiraz University, Shiraz, Iran*

Mahsa Majzoobi - *Department of Food Science and Technology, School of Agriculture, Shiraz University, Shiraz, Iran*

Asgar Farahnaky - *Department of Food Science and Technology, School of Agriculture, Shiraz University, Shiraz, Iran*

خلاصه مقاله:

Starch should be heated and gelatinized to show its main functions including thickening or stabilizing effects that is a limiting factor in its application. To overcome such problems, pre-gelatinized starch has been developed that can immediately increase viscosity at room temperature. This kind of starch can be used in sauces as thickener, stabilizer or fat replacer. But acetic acid as the other component of these products may have interaction with starch. In this study the physicochemical properties of native and drum-dried pre-gelatinized wheat starches were investigated in the presence of 0, 500, 1000 and 10000 mg/kg acetic acid at room temperature. With starch modification, solubility, water absorption and pasting properties increased significantly. Addition of the acid slightly increased the solubility while decreased water absorption, cold water viscosity and gel strength. Different levels of the acid had no significant effect on native starch. Increasing the acid concentration enhanced the effects of acetic acid

کلمات کلیدی:

Native wheat starch, Drum dried pre-gelatinized starch, Acetic acid

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