

Effect of Different Texture Modifier on Rheological Properties of Apricot and Strawberry Jellies

Beatrix Szabó-Nótin

Szent István University, Hungary

Apple pomace a cheap by-product of apple juice production is rich in pectin, antioxidants and flavor compounds. It could be used for several applications such as pectin recovery jam and jelly production enzyme production, animal feed, organic acid production, ethanol production as a source of aroma compounds and natural antioxidants. Due to its high pectin content apple pomace could be used as a natural texture modifier in food products after a simple drying process. Our aim was to prepare and examine baking stable fruit products made with different kinds of texture modifier and apple pomace.

Strawberry jellies were prepared with pectin, combined apple pomace with pectin, and nothing but xanthan. Therefore also made apricot extra jam with pectin, combined apple pomace with pectin, and nothing but gelatine. The products were compared them to each other by studying their rheological, structural, baking and sensual characteristics. Rheological measurements were performed using a Physica MCR 51

rheometer (Anton-Paar GmbH., Graz, Austria). The amplitude sweep method was carried out at 20 °C, increasing strain value from 0.5 to 200%, at constant angular frequency (10 rad s⁻¹), using five replicates per sample. Samples were changed after each parallel measuring in order to avoid the change in rheological properties. Results were recorded and analyzed using Rheoplus software ver 3.2

Using apple pomace as a gelling agent increases the nutritional value of jams because of its high antioxidant content, increases the marketing value of jams by decreasing the amount of food additives and also enhances to decrease the waste production of industrial apple processing technologies. It would be important to make more experiments to establish the ideal pectin-apple pomace ratio, and, in the interest of the sensual features' improvement, it is advisable to use apple pomace with smaller granules.