FUNCTIONAL PROPERTIES OF JABOTICABA SKINS FLOUR

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Functional properties are physiochemical characteristic of some food components that influence their appearance and behavior in a specific way. These characteristics are usually associated to the protein and alimentary fiber. The jaboticaba skins flour (JSF) is rich in dietary fiber. The objective in this work was to evaluate the functional properties of JSF for its effective use in the food industry. The jaboticaba skins were dried in a food dryer at 45°C and soon afterwards, ground and stored in aluminum covered flasks at room temperature. The functional properties, nitrogen solubility, water and oil absorption, and foam and emulsion stability were determined. The nitrogen solubility in JSF remained constant from pH 2 to 5 and increased at pH 6, again remaining constant until pH 9. The absorption of water and oil were high, the highest being oil. At 30 min after high-speed agitation 50% of the initial volume of foam remained and at 60 min there was no foam, indicating that the foam formed by JSF is not very stable and does not present good foaming characteristics. After 2 hours of agitation 22% reduction of foam was observed in the foam and a slight increase in the oil and water volume. We concluded that JSF has better nitrogen solubility from pH 6, it presents high water and oil absorption and possesses considerable emulsion stability. The flour is indicated for the preparation of foods that require those characteristics.

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