Physical Properties of Policaju Based Films

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The use of edible films in the food protection and preservation has recently increased since they offer several advantages over synthetic materials, such as being biodegradable and environmentally friendly. This work aimed at producing and evaluating the physical proprieties of polysaccharide films from *Anacardium occidentale* L. tree gum (Policaju) with a view to further application as a coating of fresh fruit. The films were prepared with Policaju concentrations of 1.5% and 3.0% (w/v) and Tween 80 concentrations of 0.0% and 0.1% (w/v), together with sorbitol always present at the concentration of 0.4% (w/w). The films demonstrated a reduction on tensile strength value (4.61 to 3.50 MPa and 8.67 to 5.40 MPa) and elongation at break (15.01% to 9.08% and 15.24% to 5.93%), when Policaju concentration was increased from 1.5% to 3.0% in films without and with Tween 80, respectively. The presence of Tween 80 reduced the opacity and increased of water vapor permeability. These findings provide important information on properties of Policaju films in view of their use by the food industry to the improvement of fruits storage conditions.

Key words: *Anacardium occidentale* L.**,** edible films, polysaccharide
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