

Title Polysaccharide from *Anacardium occidentale* L. tree gum (Policaju) as a coating for Tommy Atkins mangoes

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Abstract

Policaju-based coatings were applied on “Tommy Atkins” mangoes and the effects of four different treatments on mango shelf-life were evaluated under storage condition at 4°C and 82 % of relative humidity over 28 days. The surface tension of mangoes was found to be 29.04 mN m⁻¹; the dispersive and polar components were 27.57 mN m⁻¹ and 1.47 mN m⁻¹, respectively, and the critical surface tension was 22.7 mN m⁻¹. A significantly lower mass loss was observed in all mangoes treated with Policaju-based coatings. For all applied treatments, no significant variation in the total soluble solids and pH was detected over the experimental storage time. The results show that Policaju-based coatings have a positive effect on the shelf-life extension of mangoes at low storage temperatures (4°C).

<http://www.springerlink.com/content/yw132122u2327750/fulltext.pdf>