

**Title** Edible coating in minimally processed pupunha heart palm: sensory quality during the storage  
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### Abstract

**Introduction:** The palm is considered a typically Brazilian food. The pupunha palm (*Bactris gasipaes* HBK) has advantages compared to other native palms for the palm production in terms of tillering and no browning. While conventional methods of food preservation increase the shelf life through drastic treatments, the minimal processing has the advantage of convenience and freshness. In recent years, research on fresh-cut fruit and vegetables includes the use of edible coatings. This work aimed at evaluating the sensory quality of minimally processed pupunha heart palms coated with edible gelatin and polyethylene glycol. The judges' decision of accepting or rejecting the product was investigated in order to establish the shelf life of the products. **Materials and Method:** Appearance, flavor and texture attributes of pupunha heart palms stored at 2°C, with or without (control) coating were evaluated by eight trained individuals using the multiple comparison test, through the structured difference scale (ranging from: 1-extremely less than control; 5-equal control; 9-extremely more than control). The product evaluation in terms of being "acceptable" or "rejected" by judges was also investigated at five different times during the storage. The data were analyzed by analysis of variance and Dunnett test. **Results and Discussion:** There was no significant difference ( $p < 0.01$ ) among coated and control samples for the flavor attributes during storage. The appearance attributes "presence of lumps" and "bright" had the mean score 7 (much high than the control) for both coatings at 17 days of storage, probably due to inappropriate homogenization of the coating process solutions. At the 22nd day both coated products were rejected by about 20% of tasters. Since the time of storage has normally been estimated when the product is rejected by 50% of participants, the sensory shelf-life could be established as being 22 days, considering a more value of 20% rejection.