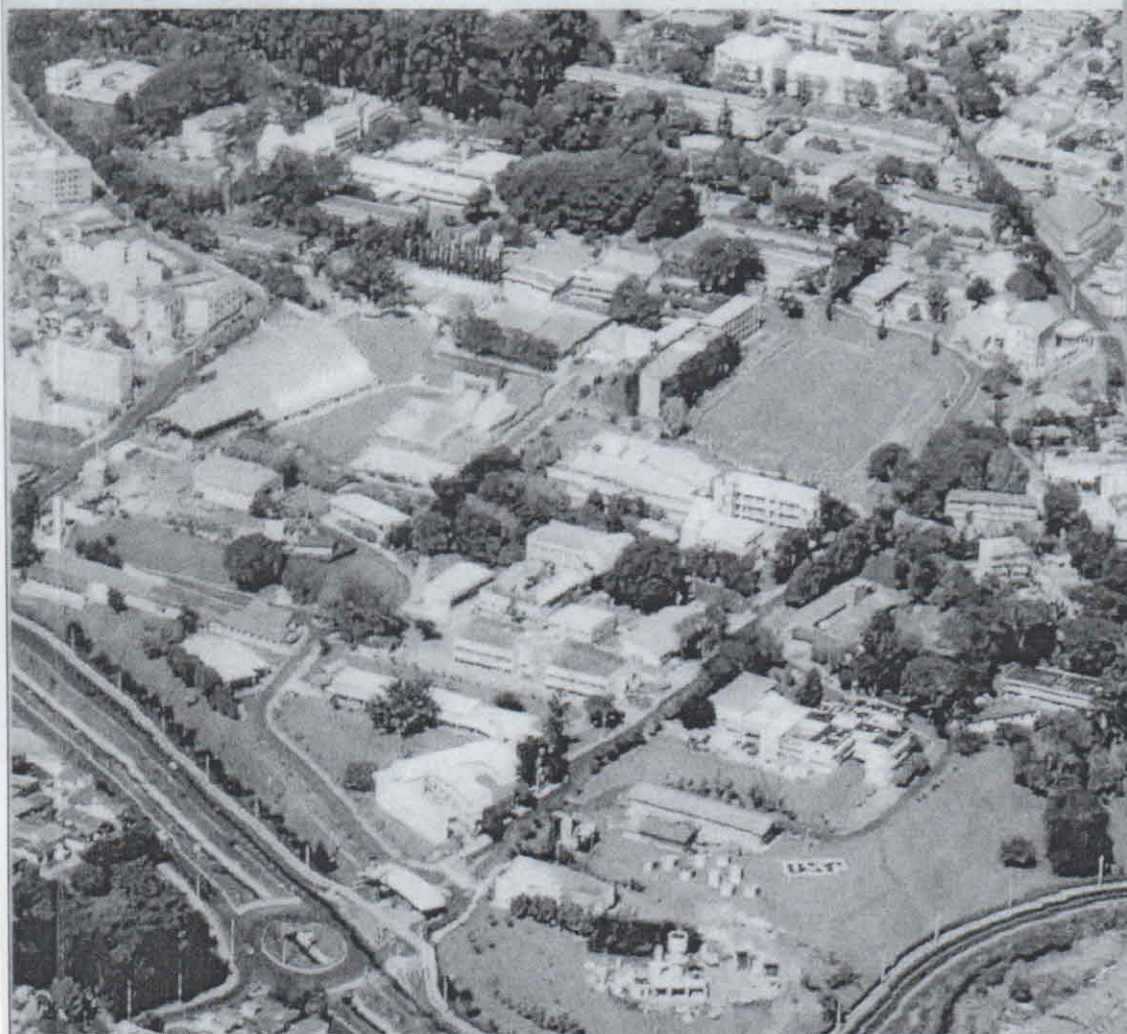


IQSC

December , 02 - 05, 2010

Instituto de Química
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Giuseppe Versini, uno dei massimi esperti

presso l'Università di Padova. Dal 1974 ha lavorato fino a diventare Coordinatore del Laboratorio Sperimentale nel 1995, incarico che ha permesso di gas cromatografia applicata alla tutela della genuinità e dell'origine dei prodotti alimentari in Europa, nel campo delle tecniche di riscontro e tutela di origine, processo e controllo. Centrale Repressione Frodi del Ministero delle Politiche Agricole nella Sottocommissione metodi di analisi del vino nonché membro di varie Commissioni applicati a varie matrici alimentari. Ha partecipato a varie riunioni scientifiche internazionali e ha tenuto in buona parte presentati su invito a livello di diverse università.

Nei quali si realizzava, Versini ha favorito il "trasferimento alla pratica" sia in campo nazionale che internazionale. La concretezza della sua

VIII Brazilian Meeting on Chemistry of Food and Beverages – VII BMCFB

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Dedicated to
Giuseppe Versini
in memoriam

Book of Abstracts

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Quality and characterization.

Paula C. S. Jorge¹, Maria Helena M. da Rocha-Leão²
 Paulo Roberto-FJ, Brazil

...the 112 microns was the most frequent... Therefore, it can be inferred that the... proportion of capsul, the smaller the... size, that means that the amount of Capsul... proportional to the particle size, was... verified through the Scanning electron... that the material obtained was... of intact particles, that had no holes and... of geometric shapes, as can be seen in... given, figure 1. The integrity of the... with no incidence of holes, points out that... material is protected, which... longer shelf life for the final product.



Scanning Electron Microscopy – Powder of the sample (500x zoom).

Conclusion

Regarding the outcome, the drying of pulp by the foam mat drying process, using a wall material and stabilizing foam, proved a good methodology for obtaining micro-papaya pulp. This study's results represent a great step for innovation in the processed fruit field, which continues to be a technological area where new research and discoveries are welcome.

Acknowledgement

UFF and CBPF for supporting in the development of this work. CAPES, for the financial support.

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2. Washid, D.T.N.; Sivakumar, D.; Gera, A.; Souza Jr., P.F. Papaya (fruta papaya L.) Biology and Production. *Tree and Forestry Science and Biotechnology*, Global Science, 2007.

Influence of the chitosan films for the 'Royal Gala' apples quality stored at ambient temperature, after storage under controlled atmosphere and low temperature

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Keywords: chitosan, 'Royal Gala' apple, covering film, controlled atmosphere storage, post-harvest, physicochemical characteristics.

Introduction

'Royal Gala' apple is the most cultivated apple cultivar in Brazil. The seasonality of the production makes necessary to store the fruits after harvest under controlled atmosphere, in order to extend the post-harvest period. Besides these storage conditions, the use of covering film works like a barrier to water and gases. The chitosan covering film is able to change the conditions around the fruit, reducing the physicochemical and microbiological changes, and also improving the shelf life (1).

The aim of this work was to evaluate the influence of the chitosan film in the quality of 'Royal Gala' apples stored at ambient temperature, after storage at controlled atmosphere and low temperature. 'Royal Gala' apples harvested in 2009 were covered with chitosan film 0.2% (m/v) (MRQ) (2) after 6 months at controlled atmosphere (1.8% O₂; 2.5% CO₂, RU of 88-96%) at 0 °C and control fruits (MC) did not receive any treatment. The fruits were physicochemical and instrumentally evaluated at zero, 7, 14, 21, 28 and 35 days of storage.

Results e Discussion

The firmness of all the fruits was reduced during storage (Figure 1). The ratio and reducing sugars improved with time for all fruits, while total titratable acidity was reduced. Soluble solids and pH improved in the MRQ during storage, but was constant in the MC. Total sugar of MC increased and MRQ was constant. The total solids were slightly reduced, exception of MRQ and ascorbic acid was drastically reduced during storage (Figure 2).

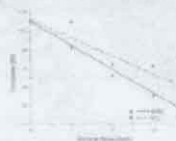


Figure 1 – Firmness linear regression for 'Royal Gala' apples stored at ambient temperature, after storage at controlled atmosphere and low temperature.

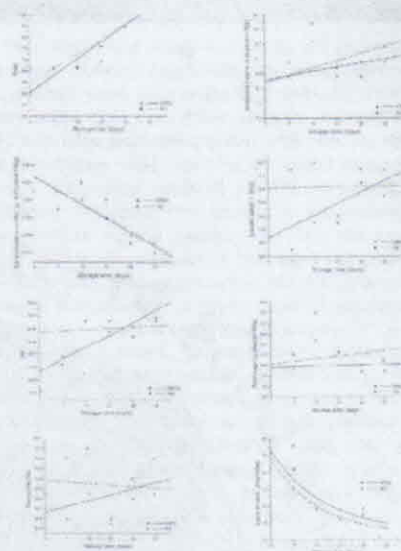


Figure 2 – Linear regressions of ratio, reducing sugars, total titratable acidity, soluble solids, pH, total sugar, total solids and ascorbic acid decay curve for 'Royal Gala' apples stored at ambient temperature, after storage at controlled atmosphere and low temperature.

Conclusion

The use of chitosan covering film was effective in reducing ascorbic acid losses and in total sugars maintenance throughout storage. The MRQ showed lower levels of reducing sugars during the storage.

Acknowledgement

To CAPES, Embrapa Instrumentação and Fischer S/A.

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