
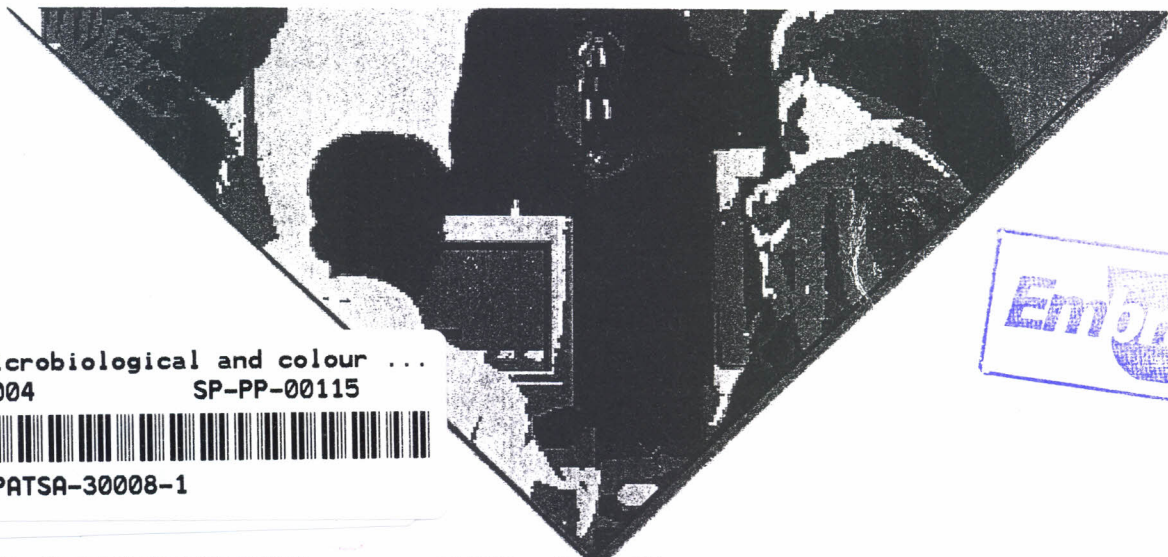


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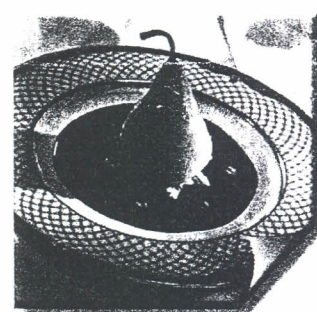
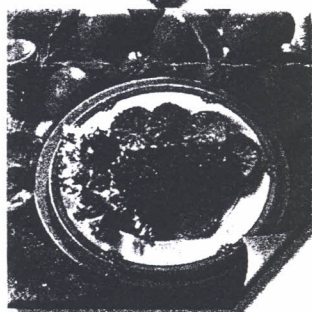
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Microbiological and colour ...
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**Effect of using PET packaging
on the quality of an orange juice made from concentrate.**

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Orange juice is the most important fruit juice in the world and 90 % is made from frozen concentrate. The food and drink industry is currently looking for suitable raw materials and packaging to improve quality and shelf life. Plastic packaging is increasingly used for economic reasons and the most widely used is PET (polyethylene terephthalate). However, it is known that PET has a low oxygen permeability and can absorb certain flavour compounds from the food matrix. In addition to these two phenomena, shelf life is also reduced by degradation of the juice through Maillard reactions that occur using both glass and plastic packaging. Our study examines the relative importance of these three phenomena in decreasing shelf life. By understanding which of the three phenomena most influences the degradation of orange juice packed in plastic containers, future studies will be able to focus on this aspect.

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**Microbiological and colour changes in umbu (*Spondias Tuberosa* Arr. Cam.)
in the mature green stage, during storage under accelerated conditions.**

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Umbu (*Spondias tuberosa* Arr. Cam.) is a highly perishable fruit and thus its use in the mature green stage in the form of pulp, preserved by a combination of methods, could be an economically interesting alternative for later processing. The objective of this study was to study the microbiological and colour changes in pasteurized umbu pulp during 120 days of storage at 40°C. A factorial type design was used with 3 variables (sugar, potassium sorbate and sodium metabisulphite concentrations) with 2 repetitions. The results showed that the pulp was microbiologically stable during the storage period (NMP < 3.0/g for the coliform count and < 300 CFU/g for yeasts and moulds). The values for L* increased, signifying accentuated darkening, and a* and b* increased and decreased respectively, resulting in an olive green tone, different from the light green of the fresh pulp. It was concluded that the colour change was the limiting factor for the conservation of this pulp by combined methods.

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**Sensory alterations in green umbu (*Spondias Tuberosa* Arr. Cam.)
marmalade-like during storage.**

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Umbu (*Spondias Tuberosa* Arr. Cam.) is a fruit of economic importance for the North Eastern region of Brazil, due to the commercialisation of various products, including the preserve. The objective of this study was to verify the effect of different additives and packaging materials (polypropylene and cellophane) on the sensory properties of this preserve during 120 days of storage. The difference from control technique was used, with a trained panel of 8 judges evaluating the following attributes: green colour, brown colour, shine, aroma, texture, elasticity, characteristic flavour, acid taste, sweet taste and caramel taste. The results showed that the products lost their characteristic green colour and increased the caramel and sweet tastes and the firmness at higher temperatures (43°C), and that the best conditions to attenuate these effects were the addition of pectin and glucose syrup, the use of polypropylene packaging and storage at 30°C.

NOTES

