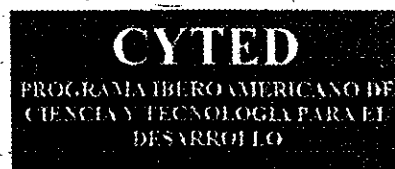


**II CONGRESO IBEROAMERICANO DE INGENIERÍA DE ALIMENTOS**  
**"Tecnologías para el procesamiento y conservación de alimentos"**



**II CONGRESSO IBERO-AMERICANO DE ENGENHARIA DE ALIMENTOS**  
**"Tecnologias para o Processamento e Conservação de Alimentos"**

**RESÚMENES DE  
TRABAJOS**



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**PLAPIQUI (UNS-CONICET) - 24 al 27 de marzo de 1998 - Bahía Blanca ARGENTINA**

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## II CONGRESO IBEROAMERICANO DE INGENIERIA DE ALIMENTOS

### "Tecnologías para el procesamiento y Conservación de alimentos"

Universidad Nacional del Sur  
24 al 27 de marzo de 1998  
Bahía Blanca (Bs. As), Argentina

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FUNDASUR	Fundación del Sur para el Desarrollo Tecnológico
CONICET	Consejo Nacional de Investigaciones Científicas y Técnicas
CIC	Comisión de Investigaciones Científicas de la Provincia de Buenos Aires
CRIBABB	Centro Regional de Investigaciones Básicas y Aplicadas de Bahía Blanca
MBB	Municipalidad de Bahía Blanca

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**SHELF- LIFE OF MINIMALLY PROCESSED APPLE STORED AT 4°C****A.M.C.N. Rocha and A.M.M.B. Morais****Escola Superior de Biotecnologia, Universidade Católica Portuguesa****Rua Dr. Antonio Bernardino de Almeida, 4200 Porto - Portugal****Fax 351 2 5580063 email amorais@esb.ucp.pt**

The physiology of minimally processed (MP) fruits has a lot in common with the physiology of wounded tissues. Wounding stimulates the respiration rate, induces the ethylene synthesis, and the enzymatic activity, and promotes microbiological development. All these processes lead to an accelerated quality loss, including of colour and firmness attributes.

The objective of this work was to evaluate physical, chemical and sensorial changes of MP apple (cv. Jonagored) stored in the dark at 4°C in order to determine the critical quality parameter and to estimate the shelf-life.

Colour was found to be the critical parameter. Changes of this quality parameter were considered to be quite severe since 'Jonagored' apple cubes underwent surface browning during the first days of storage. Therefore, the shelf-life of MP apple was very limited (three days, maximum).

Sensory analysis and objective quality evaluation of stored MP apple were considered to be highly correlated in terms of colour and flavour, specially with respect to fructose and sucrose contents. Moderate correlations were found with respect to firmness, titratable acidity and pH.

To be able to extend the shelf-life of MP apple research is required foccusing the control of surface browning which may be achieved by inhibition of the enzymes involved in colour changes. The use of chemical additives and / or controlled atmosphere storage may be used for this purpose.

**Acknowledgements:** This work was supported by a grant of Praxis XXI (BD 5365/95)