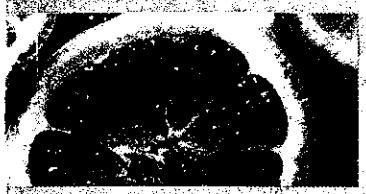
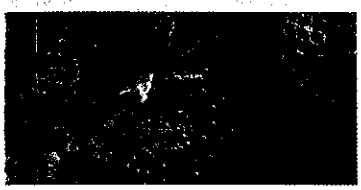
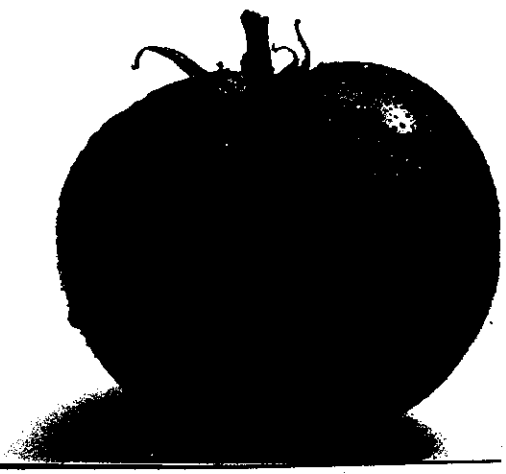
Nutritionists meet Food Scientists and Technologists

12-14 APRIL 2000 • FUNDAÇÃO DR ANTÓNIO CUPERTINO DE MIRANDA • PORTO • PORTUGAL





ABSTRACT BOOK



Poster No: 2

EFFECT OF LONG-TERM STORAGE IN CONTROLLED ATMOSPHERE ON QUALITY PARAMETERS OF 'ROCHA' PEAR

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It has been reported that pears lost their capacity to ripen normally when they were stored in air [1]. The use of new technologies such as controlled atmosphere is useful to extend the shelf-life of fruits and vegetables while keeping the quality. The objective of this work was to select the best CA conditions to preserve colour and texture of two pear (cv. Rocha) orchards from the western region of Portugal. The fruits were picked in August 1998 and stored at 0(C to 0.5(C and 90 to 95% RH in air (NA) or controlled atmosphere (CA). Pears were analyzed for texture and colour after four, seven and nine months of storage under five different conditions and after exposure to air at room temperature. The failure to ripen was evident in pears from one of the orchards used in this study. The CA storage had a beneficial effect on colour and texture of the fruits from the other orchard, since they retained their ability to ripen. The 2% O2 + 1.5% CO2 condition seemed to reduce colour changes of pears after long-term storage in CA.

[1] Wang, C. Y. and Mellenthin, W. M. 1975. Effect of short-term CO2 treatment on storage of ëdíAnjouí pear. J. Amer. Soc. Hort. Sci. 100(5): 492-495.