

STUDY OF STORAGE SUNRISE 'SOLO' PAPAYA FRUIT UNDER CONTROLLED ATMOSPHERE

**S.A. CENCI¹, A. G. SOARES¹, MARIA L. M. de SOUZA¹,
J. M.S. BALBINO²**

¹ Empresa Brasileira de Pesquisa Agropecuária - Centro Nacional de Pesquisa em Tecnologia Agroindustrial de Alimentos - EMBRAPA - CTAA, Postharvest Department, Av. das Américas 29501 - Guaratiba, Rio de Janeiro, RJ, Brasil, CEP 23020-470

² Empresa Capixaba de Pesquisa Agropecuária - EMCAPA - Rua Adalberto de Oliveira Santos nº 42 Ed. Ames 9º andar, Vitória, Espírito Sano, ES, CEP 29001-970, Cx. Postal 391, Brasil.

The effects of controlled atmosphere (CA) on keeping quality of stored solo' papaya (*Carica papaya* L.) fruit was studied. Papaya fruits were stored for 31 days at 10° C and high relative humidity under a continuous stream of nitrogen containing 8% carbon dioxide and 3% oxygen, and compared with the storage without modifying the environmental air composition (Control). Samples were collected on days 15, 23 and 31. The papaya fruits were then stored for 5 days on 25° C with 75-80% UR for ripening and evaluated on days 0, 20, 28 and 36. Weight loss, skin color, texture, ° Brix, acidity, sugar content (fructose, glucose and sucrose), Vitamin C, soluble pectin and decay were analyzed. The results showed that the CA decreased the ripening process of the fruit (softening, peel color, sugar content and soluble pectin content). There was no incidence of decay in both treatments. According to the parameters mentioned above the CA was better than control. It also allowed the papaya fruit storage for total period of 36 days, keeping quality characteristics.