POSTHARVEST QUALITY OF 'RAMA FORTE' PERSIMMON STORED AT PASSIVE MODIFIED ATMOSPHERE PACKAGING

ROSS¹,L.; ZARDO¹,F.; ANTONIOLLI², L. R.; PASINI³,J.

- ¹ Instituto Federal de Educação Ciência e Tecnologia do Rio Grande do Sul Campus Bento Gonçalves – Rio Grande do Sul, E-mail: luhross97@gmail.com; francielezardo@gmail.com
 - ² Empresa Brasileira de Pesquisa Agropecuária Unidade Uva e Vinho. E-mail: lucimara.antoniolli@embrapa.br
- ³ Instituto Federal de Educação Ciência e Tecnologia do Rio Grande do Sul *Campus* Bento Gonçalves – Rio Grande do Sul, E-mail: josiane.pasini@bento.ifrs.edu.br

'Rama Forte' persimmon presents a short shelf life after harvesting and during commercialization. The objective of this work was evaluate quality of 'Rama Forte' persimmon conditioned under modified atmosphere and kept under refrigeration. Fruits were collected in a commercial orchard located in Antônio Prado, RS. After selection of color, size and mechanical damage, persimmon were conditioned in bag of low density polyethylene (LDPE), bag of LDPE with additive and breathable packaging Stepac Xtend® 815-PN21/R. Some fruits were not packaged considered control treatment. The persimmons were stored in a cold room at 0 ± 0.5 ° C and 90 ± 5% relative humidity. The fruits were evaluated at 30, 60 and 75 days for pulp firmness, mass loss, epidermis color, commercial quality and gaseous composition (O2, N2 and CO2) for fruits packed in bags. Pulp firmness and mass loss did not differ significantly between treatments in all evaluated periods. After 30 days, control treatment presented lower luminosity than the others, differing statistically from the conditioned fruits. After 60 days of storage, 'Rama Forte' persimmons stored without packaging were discarded because did not present adequate commercial quality. There was no decrease in commercial quality after 30 days of storage for fruit in packaging. In evaluation of 60 days of storage, 3.7%, 13.6% and 1.23% of fruits presented commercial losses and 75.3%, 46.75% and 35.8%, at 75 days, respectively to fruits packed in LDPE, LDPE bags with additive and breathable Stepac Xtend® packaging. The gaseous composition of the Stepac Xtend® breathable package differed statistically from the other packages in all periods analyzed. The 'Rama Forte' persimmons packaged in the analyzed packages showed small deterioration rates up to 60 days under refrigeration. Persimmons conditioned in the Stepac Xtend® 815-PN21 / R breathable packaging presented better quality after 75 days of refrigerated storage.

Financial Institutions: Empresa Brasileira de Pesquisa Agropecuária (EMBRAPA); Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul (IFRS).

Keywords: Diospyrus kaki L; Conservation, packaging