

Abstract:

'Napoleón' table grape was stored in sealed plastic baskets up to 41 days at 0 °C followed by 4 days in air at 0 °C and 3 days at 15 °C. Microperforated polypropylene (PP) of 35µm thickness and as control macroperforated (MPP) films were used. Before sealing, a soaked filter paper with 15 µl of hexanal or 10 µl hexenal was added to baskets. Steady state modified atmosphere (MA) was 17% O₂ and 3%CO₂. Visual appearance of clusters under MA was better than that of control. Flavour of hexenal treated berries was scored better than for the other treatments. Weight loss in MPP reached 3.7% after shelf life while for PP treatments were 0.6%. After shelf life lowest fungal attacks (0.6%) developed for hexenal treated clusters. No differences in firmness were found in PP treatments while for MPP was slightly lower. We concluded the best results for keeping 'Napoleón' cv. quality during long-term cold storage were obtained by hexenal fumigation combined with MA.