Abstract:

Strawberries (*Fragaria ananassa* cv Selva) were put in bags with different permeability to CO_2, O_2 and H_2O vapor, heat treated in an air oven (45°C, 3 h) and stored at 0°C for 0, 7 or 14 days. After the treatment, the fruit was maintained at 20°C for 48 h. The effect of heat treatment and films on fruit firmness, superficial color, anthocyanin content, and decay was analyzed. Heat-treated fruit maintained firmness and was less susceptible to fungal attack than the control. Superficial color development and anthocyanin accumulation were delayed in the case of heat-treated fruit. When the fruits were treated and packed in bags that retain CO_2, the effects were enhanced and fruit postharvest life was extended. These results show that the use of heat treatments in combination with refrigerated storage could be a good alternative to keep strawberry fruit quality. Additional improvement can be obtained by performing the heat treatment in bags that allow the CO_2 produced as a consequence of the enhanced respiration rate during treatment to be retained.