Abstract:

The most important limiting factor to extend the shelf life of fresh figs is the fast evolution of its metabolism and the grey decay with too drastic softening that handicaps the normal commercialisation. Ten years ago, the first studies with SO2 were initiated in the Instituto del Frio with the intention of controlling “botritis” attack by Botrytis cinerea and to prolong the shelf life of the fresh fig, as well as it is in the case of table grape.

Small plastic containers, around 250g of 35-40mm in size “Melar” figs, were packed in 25µm thick PE bags and stored at –0.5°C, after precooling 5 hours by air at 2.5m.s^{-1} ; one piece of “SO2 generator” by methabisulphyte was inserted into the bags.

With less than 1.5ppm SO2 during the first four days in the surrounding atmosphere, the residues of sulfur dioxide were removed in 24 hours, after one week of storage, and B. cinerea was controlled even after 56 days of storage.

Texture, pulp colour, total and soluble solids, acidity and weight losses are considered during the long term storage in presence of a slow release system of sulfur dioxide emission. SO2 treated fruits were in better commercial condition in comparison with ozone, ethylene absorber and high CO2 tested fruits.