

Abstract:

Sophisticated packaging solutions can be used in order to preserve vegetables during storage and transport. Polymeric films with selective barriers matching the respiration of the produce, thereby creating an ideal atmosphere inside the package, are available on the market. Fresh broccoli (*Brassica oleracea* L. var. *italica* 'Monterey') heads were packed in 4 different commercially available polymeric films, and stored at 4 and 10°C respectively. During storage the weight, colour, chlorophyll content and texture were monitored. The investigated polymer materials were oriented polypropylene (OPP), polyvinyl chloride (PVC) and two types of polyethylene (PE) packagings. The choice of packaging material had an impact on the measured quality parameters of broccoli. Storage in OPP resulted in the longest storage life. Broccoli stored in PVC film deteriorated faster than broccoli packaged in the other materials. It was also observed that the influence of the type of packaging material was more important at the higher temperature. The implications of this work for the packaging and storage of fresh broccoli will be discussed.