

Abstract

Modifying the atmosphere surrounding the product, and lowering the temperature can extend the shelf life of the produce. High oxygen modified atmosphere (HOA) (i.e. > 70% O₂) slowed down discolouration in shredded carrot and sliced mushroom by appearance, but oxygen toxicity was showed with fresh cut mango. High O₂ concentrations enhance some of the effect of the respiration on fresh sliced mushroom and fresh cut mango. Also, HOA were found to be partly effective on activity of PPO but had no effect on activity of catalase and amylase enzymes in significant. While high O₂ concentrations for minimally processed of fruits and vegetables in this experiment showed a retarded growth during storage. The HOA can be applied for some specific ready-to-eat fruits and vegetables, and more effective if combined with CO₂.