

Abstract:

The success of controlled atmosphere (CA) and modified atmosphere packaging (MAP) depends on a reduction of the metabolic rate of the product. Commonly a combination of low O₂, high CO₂ and low temperature is applied (Hertog et al., 1998). Recently superatmospheric oxygen conditions have been proposed for MAP (Jacxsens et al., 2001). Exposure to superatmospheric O₂ concentration may reduce browning and microbial growth (Kader and Ben-Yehoshua, 2000). The aim of this research was to study the effect of CA with high O₂ and moderate CO₂ for reducing the physiological activity and keeping quality attributes of fresh-cut butter lettuce.