

Abstract:

Experiments have been conducted over the last four seasons to determine the effect of temperature and controlled atmosphere during long term storage on the quality and physiological disorders of few cultivars of Chinese cabbage. The highest percentage of physiologically damaged heads was noted during storage in air. The most advantage storage temperature, to avoid physiological damage, depends on cultivars, length of storage period and gas composition of atmosphere. Some cultivars can be stored at 0° and 2°C without great losses due to physiological damage (Bilko F1, Gold Rush F1, Maxim F1, Morillo F1), while other should be stored at 2°C (Parkin F1). Asten F1 was susceptible to physiological damage at both compared temperatures. Green colour of leaves and firmness of heads were best retained at 1% CO₂ - 1% O₂. Low concentration of CO₂ and O₂ highly decreased the range of physiological damages and improved quality and marketable value of Chinese cabbage. Quality and marketability of Chinese cabbage decreased with storage period.