

Title Effects of different storage conditions on chemical and physical properties of white mushrooms after vacuum cooling

Author Fei Tao, Min Zhang, Yu Hangqing and Sun Jincai

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Abstract

Vacuum cooling was used as a rapid cooling method for white mushrooms. In the current study, experiments were carried out to evaluate the effects of different storage conditions on weight loss, the respiration rate, soluble solid content, membrane permeability and degree of mushrooms browning. To investigate the influence of storage conditions on the properties of mushrooms, mushrooms were stored in three different conditions: (1) cold room, (2) hypobaric room, and (3) modified atmosphere packaging (MAP). Additionally, their cooling processes were also investigated. The results showed that the optimum storage condition was modified atmosphere packaging (MAP). Also the results indicated that weight loss, respiration rate, soluble solid content, membrane permeability and degree of mushrooms browning had significant difference under different conditions during storage.