

不同处理对桃果实MA贮藏期和货架期挥发性芳香物质含量的影响

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Title: Effect of Three different Treatments on the Aroma Synthesis of Peach Fruit during MA Storage and Shelf Life

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摘要: 为了探明乙烯与桃果实冷害之间的关系, 以‘八月脆’桃果实为试验材料, 研究了乙烯吸收剂、1—MCP、外源乙烯对低温MA贮藏期间和货架期桃果实的主要风味物质含量的影响。结果表明: 外源乙烯处理能使桃果实贮藏前期保持很好的风味, 但后期风味最差。低温MA贮藏期间和货架期期间1—MCP处理与乙烯吸收剂处理类似, 贮藏后期还能保持较好的桃风味, 且1—MCP处理效果更好。低温MA贮藏期间, 己醛、苯甲醛含量受低温抑制明显, 未随乙烯存在与否而明显变化; 反—2—己烯醛随外源乙烯有无而变化, 芳樟醇、 γ —癸内酯含量和脂氧合酶(LO X)活性因乙烯存在而降低或后期降低, 这些物质变化可以作为评价桃果实冷害的指标。

Abstract: Variations of the flavor components in peach (variety Bayuecui) under three treatments (ethylene absorbent, 1—MCP, and exogenous ethylene) were studied during the low temperature storage (modified atmosphere, MA) and shelf periods to investigate the relationships between the function of ethylene and freezing injury of the fruit. The results showed that the exogenous ethylene treatment could make the peach fruit keep its flavors during the early storage period, but worst in the late periods; 1—methylcyclopropene treatment was similar to the ethylene absorbent treatment, it could keep the flavors in the late period, and the 1MCP treatment was better. During the low temperature modified storage period, the inhibition effect on the contents of hexenal and benzaldehyde was obvious, and didn't change with or without the presence of ethylene, the content of trans—2—hexenal however, changed with ethylene; the contents of linalool, γ —decalactone and LO X activity decreased because of the presence of ethylene absorbent. The changes of these components can be

❖ [导航/NAVIGATE](#)

[本期目录/Table of Contents](#)

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