

**Title** Effect of 1-MCP on postharvest physiology and quality of 'Bayuehong' pears during storage  
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#### **Abstract**

The effects of 1-MCP treatments on the several physiological characteristics of 'Bayuehong' (*Pyrus bretschneideri* Rehd x *Pyrus Communi*) pears during storage period were studied. The results showed 1-MCP applications significantly inhibited the respiration rate, relative conductivity and the PPO activity of 'Bayuehong' pears at both 0°C and ambient temperature during storage. 1-MCP treatments also increased the POD activity during cold storage, 1-MCP was very effective in prevent the development of skin blacking (a symptom like superficial scald of apples) and core browning. 1-MCP treatment also delayed loss of firmness, TTS and titratable acidity no matter at ambient temperature and 0°C. The results also indicated that 1-MCP could delay fruit ripening and improve storage quality significantly.