

**Title** Suitable temperature and O<sub>2</sub>/CO<sub>2</sub> composition for fresh fruit storage of *Ziziphus jujuba* 'Dongzao'

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#### **Abstract**

To prolong the duration of fresh fruit storage of *Ziziphus jujuba* 'Dongzao', the fruit respiration should be controlled to lowest level. The effective way is to lower the storage temperature while considering chilling-injury on the fruits. In the present paperwork, the freezing points of fresh fruits with different maturity degree were studied using a modified method of thermoelectric couple. This will be useful for determining the storage temperature of different maturity stages. Atmosphere in the storage package also plays a very important role in extending the duration of fresh fruit storage. In this study we found that high concentration of CO<sub>2</sub> and low concentration of O<sub>2</sub> lead to fresh fruit injury of *Ziziphus jujuba* 'Dongzao'. O<sub>2</sub>/CO<sub>2</sub> ratio should be maintained at a certain level (approximately 19:0.2) in long-term storage and it is recommended that the fresh fruit may be stored in polyethylene bag with holes for air exchange and CO<sub>2</sub> absorbent in the bag in order to keep a balance of O<sub>2</sub> and CO<sub>2</sub>.