

**Title** Stem scar - major pathway for quality changes in tomato fruit stored at different temperatures  
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### **Abstract**

Pink tomato cv. 198 fruit was stored without peduncles (-P, stem scar) or with peduncles (+P). Fruit was then dipped in 50°C for 2 min, or rinsed over brushes with hot water (HWRB) at 50°C for 15 s. Untreated fruit served as control. After prestorage heat treatment, fruit was stored at 2°C and 10°C 3 weeks plus additional 3 days at 20°C. The following quality parameters were evaluated at the end of storability and shelf life: weight loss, color development, firmness, total soluble solid, citric acid, decay and defects (chilling injury-CI) and CO<sub>2</sub> evolution (rate of respiration). For successful tomato storage 3 weeks +3 day (shelf-life) it is recommended to harvest fruits at pink color phase, storage them at 2°C which means previous exposure of fruits to them (HWRB at temperature of 50°C for 15sec) treatment and peduncles-calyx removal.