

**Title** Evaluation for effectiveness of calcium chloride treatment to the postharvest quality of freshly harvested strawberry fruits

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#### **Abstract**

Evaluation of effectiveness of calcium chloride treatment on the postharvest quality of freshly harvested strawberry fruits was carried out during storage at 10 °C by using three different concentrations (1, 2 and 3%). Dipping time was fixed for 1 min. Undipped fruits were treated as control samples. Fruits were drip-dried before packing by using clip-on lid round polypropylene containers (50 mm in diameter). Evaluation was conducted on alternate days by monitoring the weight loss, total soluble solids (TSS) and pH values. Sensory evaluation and overall appearance changes were also monitored on the evaluation day. Strawberry treated with 1 % calcium chloride maintained the firmness with good sensory acceptance due to combined sour (pH-4.3) and sweet (TSS- 14% Brix) taste. Deep red colour development was more obvious on fruit treated with 1% as compared to the other fruits (treated and control fruits). Slight bitter taste was noticeable in the fruits treated with 2% calcium chloride. Higher TSS values were observed on fruits treated with 3%. However the fruits appearance was not well accepted as higher weight loss (1.2%) was shown towards the ends of storage period (day 8). No obvious difference was observed on disease infection of treated and control fruits throughout the storage studies.