THE EFFECTS OF PRECOOLING AND CALCIUM CHLORIDE TREATMENTS ON STORAGE QUALITY OF TOMATO (*Lycopersicon esculentum*)

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ABSTRACT

A study was conducted to look at the postharvest quality of tomato after precooling and calcium chloride ($CaCl_2$) treatments. The objective of the study is to determine the effect of precooling and calcium chloride treatment on the postharvest characteristics of tomato. Treatments were done after the vegetables are freshly harvested and transferred to postharvest lab. A total of good quality 96 tomatoes were firstly precooled then subsequently dipped with different concentrations of $CaCl_2$ at 0, 1, 2 and 3%. All the vegetables were stored for 10 days and observations were done to determine their qualities during the storage period. These vegetables were then measured to determine weight loss, texture (firmness), vitamin C, calcium content, injuries and shelf life. The experimental design was CRD (Completely Randomize Design) with factorial arrangement two (Precooled and non-precooled) × four ($CaCl_2$ concentration 0, 1, 2 and 3%) with four replications. Each replication consists of 3 fruits. Results indicate that to maintain the quality of tomatoes treatment with 3% of $CaCl_2$ preceded with non-precooled condition gives a better result.